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of Transportation
**National Highway
Traffic Safety
Administration**



DOT HS 808 395

February 1995

Final Report

Final Report of a 1992 Chevrolet Caprice into a Flat Frontal Barrier in Support of CRASH3 Damage Algorithm Reformulation

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16. Abstract <p>Five (5) frontal barrier impact tests were conducted for research and development in support of the CRASH3 damage algorithm reformulation. These tests were conducted on a 1992 Chevrolet Caprice, VIN 1G1BL5378NW138176, at Transportation Research Center Inc. on January 19, 1995. The following five tests were conducted on the vehicle:</p> <table border="1"> <thead> <tr> <th>Test No.</th> <th>Date</th> <th>Time</th> <th>Speed (Kph)</th> <th>Maximum Cumulative Crush (mm)</th> </tr> </thead> <tbody> <tr> <td>950119-1</td> <td>01/19/95</td> <td>0930</td> <td>8.5</td> <td>5</td> </tr> <tr> <td>950119-2</td> <td>01/19/95</td> <td>1035</td> <td>15.4</td> <td>49</td> </tr> <tr> <td>950119-3</td> <td>01/19/95</td> <td>1125</td> <td>15.0</td> <td>225</td> </tr> <tr> <td>950119-4</td> <td>01/19/95</td> <td>1335</td> <td>31.5</td> <td>499</td> </tr> <tr> <td>950119-5</td> <td>01/19/95</td> <td>1501</td> <td>55.4</td> <td>963</td> </tr> </tbody> </table>				Test No.	Date	Time	Speed (Kph)	Maximum Cumulative Crush (mm)	950119-1	01/19/95	0930	8.5	5	950119-2	01/19/95	1035	15.4	49	950119-3	01/19/95	1125	15.0	225	950119-4	01/19/95	1335	31.5	499	950119-5	01/19/95	1501	55.4	963
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METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
LENGTH				
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km

AREA				
in ²	square inches	6.5	square centimeters	cm ²
ft ²	square feet	0.09	square meters	m ²
yd ²	square yards	0.8	square meters	m ²
mi ²	square miles	2.6	square kilometers	km ²
	acres	0.4	hectares	ha

MASS (weight)				
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons	0.9	tonnes	t
	(2000 lb)			

VOLUME				
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft ³	cubic feet	0.03	cubic meters	m ³
yd ³	cubic yards	0.76	cubic meters	m ³

TEMPERATURE (exact)				
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

Approximate Conversions from Metric Measures

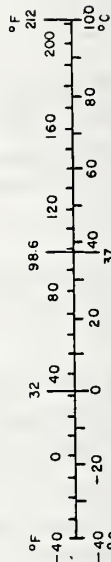
Symbol	When You Know	Multiply by	To Find	Symbol
LENGTH				
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi

AREA				
cm ²	square centimeters	0.16	square inches	in ²
m ²	square meters	1.2	square yards	yd ²
km ²	square kilometers	0.4	square miles	mi ²
ha	hectares (10,000 m ²)	2.5	acres	

MASS (weight)				
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	

VOLUME				
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m ³	cubic meters	35	cubic feet	ft ³
m ³	cubic meters	1.3	cubic yards	yd ³

TEMPERATURE (exact)				
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



*1 in = 2.54 (exact). For other exact conversions and more detailed tables, see NBS Misc. Publ. 286, Units of Weights and Measures, Price \$2.25, SD Catalog No. C13.10-286.

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Section 1.0

Purpose and Test Procedure

Purpose and Test Procedure

The purpose of the five (5) flat frontal barrier impact tests was for research and development in support of the CRASH3 damage algorithm reformulation.

The 1992 Chevrolet Caprice was equipped with a 5.7-liter, 8-cylinder, inline, gasoline engine with a 3-speed automatic transmission. A third axle was placed 660 mm behind the vehicle's front wheel centerline to raise the front wheels so that it could withstand five (5) impacts. The test weight of the vehicle with third axle was 1905 kilograms.

The vehicle was instrumented with eleven (11) accelerometers oriented to measure vehicle X-, Y-, and Z-axis accelerations.

Each crash test event was recorded by three (3) high-speed motion picture cameras operating at approximately 1000 frames per second.

Section 2.0

Vehicle and Test Data

Table 1 Test Vehicle Information

Vehicle Manufacturer: General Motors	Model Year: 1992
Make/Model: Chevrolet/Caprice	VIN: 1G1BL5378NW138176
Body Style: 4-door sedan	Color: White
Engine Data: Type: Inline Cylinders: 8	Displacement: 5.7-liter
Transmission Data: <u>3</u> Speed, <u> </u> Manual, <u> X </u> Automatic, <u> </u> Fwd, <u> X </u> Rwd, <u> </u> 4wd	
Date Vehicle Received: 01/13/95	Odometer Reading: 78572
Dealer's Name And Address: NA	

Accessories:

Power Steering	Yes	Automatic Transmission	Yes
Power Brakes	Yes	Automatic Speed Control	No
Power Seats	No	Tilting Steering Wheel	Yes
Power Windows	Yes	Telescoping Steering Wheel	No
Tinted Glass	Yes	Air Conditioning	Yes
Radio	Yes	Anti-Skid Brake	Yes
Clock	Yes	Rear Window Defroster	Yes
Other	None		

Remarks:

1. Is the vehicle stock throughout? Yes
2. Does vehicle show evidence of prior accident history? No
3. Does vehicle show any significant corrosion? No
4. Condition of the front/rear bumper and frame: Good

Certification Data From Vehicle's Label:

Vehicle Manufactured By: General Motors
Date of Manufacture: 4/92 VIN: 1G1BL5378NW138176
GVWR: 5234 lbs.
GAWR: Front: 2549 lbs., Rear: 2685 lbs.

Table 1 Test Vehicle Information, Cont'd.

Tires On Vehicle (Mfr., Line, Size): General, P235/70R15

Tire Pressure With Maximum Capacity Vehicle Load: Front: 240 kPa
Rear: 240 kPa

Spare Tire (Mfr., Line, Size): The vehicle did not contain a spare tire.

Type Of Seats: Front: Bench
Rear: Bench

Type Of Front Seat Backs: Adjustable

Maximum Width: 1980 mm

Wheelbase: 2955 mm

Location of Label Stating Tire Data:

The label was located on the driver's door.

Tire & Capacity Data From Vehicle's Label:

Recommended Tire Size: P235/70R15

Recommended Cold Tire Pressure: Front: 35 psi; Rear: 35 psi

Designated Seating Capacity: 3 Front 3 Rear 6 Total

Vehicle Capacity Weight: 1100 lbs.

¹ Pre-test attitude measured with third axle installed.

Table 1 Test Vehicle Information, Cont'd.

Weight Of Test Vehicle¹:

Right Front ²	669	kg	Right Rear	279	kg
Left Front ²	704	kg	Left Rear	253	kg
Total Front Weight ²	1373	kg	(72.1% Of Total Vehicle Weight)		
Total Rear Weight	532	kg	(27.9% Of Total Vehicle Weight)		
Total Test Weight ¹	1905	kg			

Weight of ballast secured in vehicle cargo area: 0 kg

Components removed to meet target test weight: None

CG = 1301 mm rearward of front wheel centerline

¹ Weight of third axle included in total test weight.

² The front wheel weights are for third axle wheels.

TABLE 2

CRUSH MEASUREMENTS AT VEHICLE BUMPER HEIGHT 411 MM

LOCATION	0	1	2	3	4	5	6	7
	X	Y	X	Y	X	Y	X	Y
PRE-TEST	2939	405	2862	406	2788	404	2710	404
POST-TEST 1	2939	405	2862	406	2788	404	2710	404
POST-TEST 2	2939	405	2862	406	2788	404	2710	404
POST-TEST 3	2941	397	2861	393	2787	396	2708	398
POST-TEST 4	2929	412	2852	417	2778	413	2702	414
POST-TEST 5	2946	412	2875	411	2800	411	2724	409

LOCATION	8	9	10	11	12	13	14	15
	X	Y	X	Y	X	Y	X	Y
PRE-TEST	2327	408	2252	407	2176	411	2100	413
POST-TEST 1	2327	408	2252	407	2176	411	2100	413
POST-TEST 2	2327	408	2252	407	2176	411	2100	413
POST-TEST 3	2331	398	2256	403	2181	406	2111	406
POST-TEST 4	2324	425	2248	423	2172	429	2098	424
POST-TEST 5	2348	418	2273	423	2200	424	2125	428

LOCATION	16	17	18	19	20	21	22	23
	X	Y	X	Y	X	Y	X	Y
PRE-TEST	1726	427	1652	429	1581	437	1507	437
POST-TEST 1	1726	427	1652	429	1581	437	1507	437
POST-TEST 2	1714	427	1639	432	1569	440	1505	439
POST-TEST 3	1722	414	1648	421	1569	432	1504	429
POST-TEST 4	1715	445	1645	441	1569	443	1515	443
POST-TEST 5	NA	441	1761	387	1694	362	1627	392

All measurements are in millimeters. Column readings are 75 millimeters apart starting on the left side of the vehicle.

All X-axis measurements taken from a reference plane 5454 millimeters from and parallel to the rear bumper.

All Y-axis measurements taken from a reference plane 1372 millimeters from and parallel to the vehicle's longitudinal centerline

TABLE 2, CONTINUED

CRUSH MEASUREMENTS AT VEHICLE BUMPER HEIGHT 411 MM

LOCATION	24		25		26		27		28		29		30		31	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
PRE-TEST	1127	462	1050	464	975	469	898	472	822	487	745	486	670	493	598	500
POST-TEST 1	1124	471	1049	472	972	484	897	485	824	495	741	492	665	499	587	506
POST-TEST 2	1124	464	1054	473	978	475	895	479	822	491	739	458	666	467	585	477
POST-TEST 3	1125	452	1060	462	978	458	904	462	833	468	748	478	666	482	593	502
POST-TEST 4	1156	429	1080	427	1014	425	934	431	872	460	801	478	726	493	653	530
POST-TEST 5	1316	236	1249	212	1195	197	1163	249	1187	319	1175	390	1164	466	1131	538

LOCATION	32		33		34		35		36		37		38		39	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
PRE-TEST	521	514	445	525	373	549	313	581	257	640	219	701	201	774	184	849
POST-TEST 1	510	515	433	530	362	553	295	594	245	643	205	713	192	787	174	862
POST-TEST 2	509	491	441	513	368	541	304	578	266	639	236	703	212	776	196	850
POST-TEST 3	532	525	454	566	454	566	391	580	391	580	348	640	330	712	326	793
POST-TEST 4	609	578	602	654	602	654	643	655	643	655	595	716	583	791	583	865
POST-TEST 5	1098	612	1111	688	1111	688	1131	650	1131	650	1079	692	1057	764	1063	838

LOCATION	40		41		42		43		44		45		46		47	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
PRE-TEST	166	926	154	998	143	1073	138	1148	136	1224	132	1298	124	1372	134	1451
POST-TEST 1	161	937	150	1010	143	1084	141	1162	133	1238	127	1314	129	1392	127	1468
POST-TEST 2	187	924	173	1001	174	1077	182	1154	174	1232	176	1308	173	1381	173	1655
POST-TEST 3	338	872	353	943	325	1021	339	1120	336	1196	332	1270	349	1348	338	1436
POST-TEST 4	599	945	616	1015	603	1085	590	1189	604	1262	604	1338	623	1417	610	1474
POST-TEST 5	1064	916	1070	987	1056	1066	1077	1168	1080	1243	1071	1313	1087	1394	1076	1454

All measurements are in millimeters. Column readings are 75 millimeters apart starting on the left side of the vehicle.

All X-axis measurements taken from a reference plane 5454 millimeters from and parallel to the rear bumper.

All Y-axis measurements taken from a reference plane 1372 millimeters from and parallel to the vehicle's longitudinal centerline

TABLE 2, CONTINUED
CRUSH MEASUREMENTS AT VEHICLE BUMPER HEIGHT 411 MM

LOCATION	48	49	50	51	52	53	54	55
	X	Y	X	Y	X	Y	X	Y
PRE-TEST	140	1530	146	1608	152	1690	161	1764
POST-TEST 1	134	1544	139	1617	144	1691	152	1766
POST-TEST 2	181	1531	180	1603	186	1677	189	1752
POST-TEST 3	339	1516	343	1593	344	1670	337	1747
POST-TEST 4	621	1554	615	1631	628	1706	628	1784
POST-TEST 5	1083	1534	1081	1613	1078	1690	1075	1766

LOCATION	56	57	58	59	60	61	62	63
	X	Y	X	Y	X	Y	X	Y
PRE-TEST	237	2139	284	2193	350	2226	425	2247
POST-TEST 1	237	2127	282	2173	340	2237	412	2268
POST-TEST 2	239	2118	285	2181	347	2236	417	2256
POST-TEST 3	387	2120	418	2190	418	2190	499	2198
POST-TEST 4	636	2162	675	2225	675	2225	630	2191
POST-TEST 5	1139	2136	1195	2191	1195	2191	1151	2139

LOCATION	64	65	66	67	68	69	70	71
	X	Y	X	Y	X	Y	X	Y
PRE-TEST	792	2280	862	2303	935	2317	1009	2317
POST-TEST 1	790	2299	857	2311	928	2315	1005	2314
POST-TEST 2	790	2289	855	2297	927	2315	1002	2316
POST-TEST 3	778	2284	849	2305	921	2312	991	2314
POST-TEST 4	839	2356	914	2386	981	2396	1047	2396
POST-TEST 5	1271	2372	1266	2393	1238	2384	1196	2417

All measurements are in millimeters. Column readings are 75 millimeters apart starting on the left side of the vehicle.

All X-axis measurements taken from a reference plane 5454 millimeters from and parallel to the rear bumper.

All Y-axis measurements taken from a reference plane 1372 millimeters from and parallel to the vehicle's longitudinal centerline

TABLE 2, CONTINUED

CRUSH MEASUREMENTS AT VEHICLE BUMPER HEIGHT 411 MM

LOCATION	72	73	74	75	76	77	78	79
	X	Y	X	Y	X	Y	X	Y
PRE-TEST	1391	2340	1461	2333	1535	2331	1687	2339
POST-TEST 1	1391	2340	1461	2333	1535	2331	1687	2339
POST-TEST 2	1379	2331	1454	2326	1534	2329	1682	2338
POST-TEST 3	1376	2323	1450	2324	1525	2308	1672	2321
POST-TEST 4	1425	2257	1489	2358	1553	2346	1689	2343
POST-TEST 5	1497	2259	1545	2326	1590	2301	1709	2313

LOCATION	80	81	82	83	84	85	86	87
	X	Y	X	Y	X	Y	X	Y
PRE-TEST	1990	2344	2064	2347	2140	2347	2215	2350
POST-TEST 1	1990	2344	2064	2347	2140	2347	2215	2350
POST-TEST 2	1990	2344	2064	2347	2140	2347	2215	2350
POST-TEST 3	1979	2335	2053	2344	2128	2341	2209	2335
POST-TEST 4	1981	2346	1256	2349	2132	2348	2209	2350
POST-TEST 5	2001	2340	2077	2339	2152	2344	2227	2343

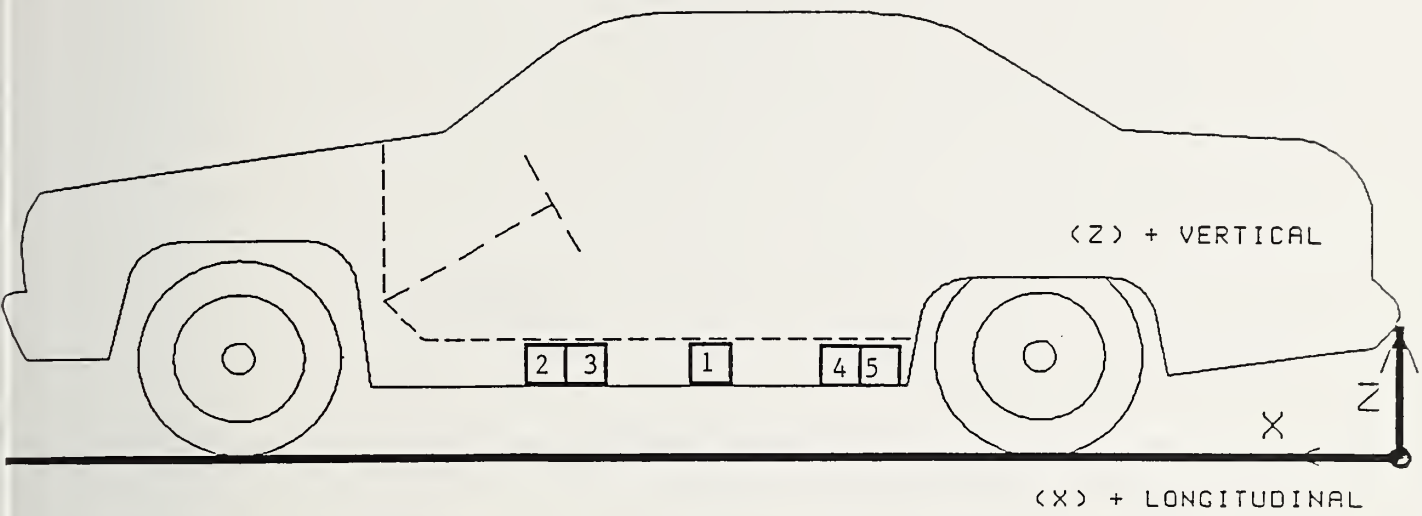
LOCATION	88	89	90	91	92	93	94	95
	X	Y	X	Y	X	Y	X	Y
PRE-TEST	2596	2356	2668	2356	2745	2356	2819	2357
POST-TEST 1	2596	2356	2668	2356	2745	2356	2819	2357
POST-TEST 2	2596	2356	2668	2356	2745	2356	2819	2357
POST-TEST 3	2584	2343	2652	2339	2733	2343	2806	2342
POST-TEST 4	2588	2357	2661	2360	2737	2355	2811	2353
POST-TEST 5	2609	2354	2681	2353	2757	2355	2831	2357

All measurements are in millimeters. Column readings are 75 millimeters apart starting on the left side of the vehicle.

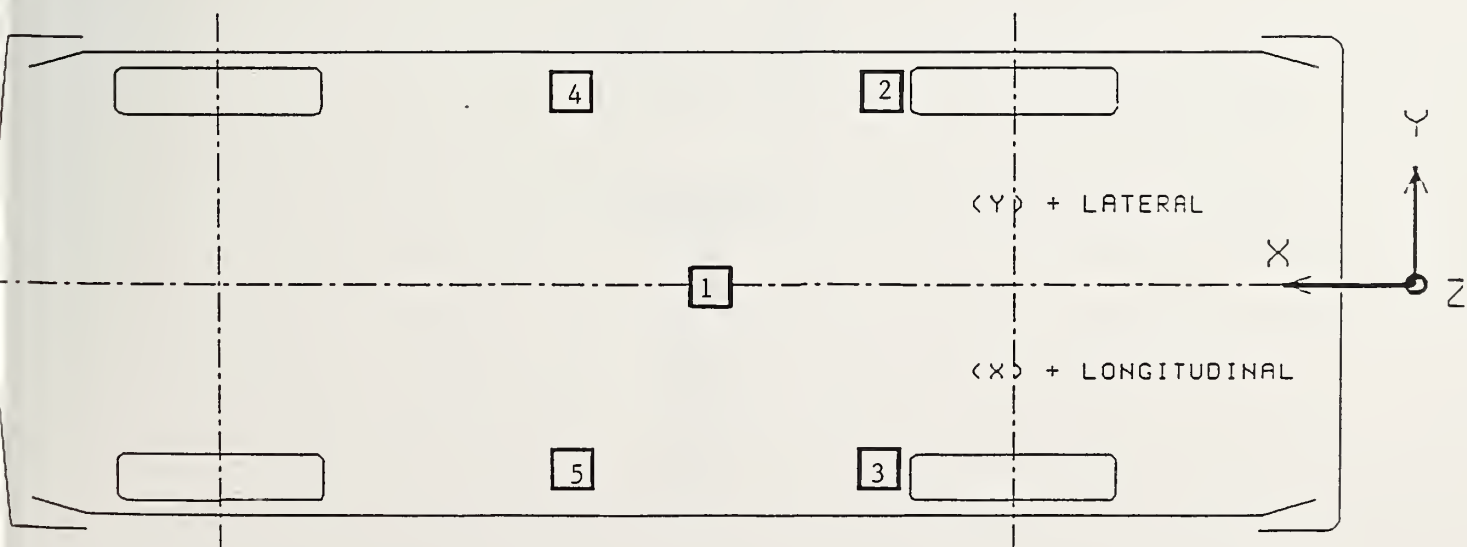
All X-axis measurements taken from a reference plane 5454 millimeters from and parallel to the rear bumper.

All Y-axis measurements taken from a reference plane 1372 millimeters from and parallel to the vehicle's longitudinal centerline

Figure 1 Vehicle Accelerometer Placement

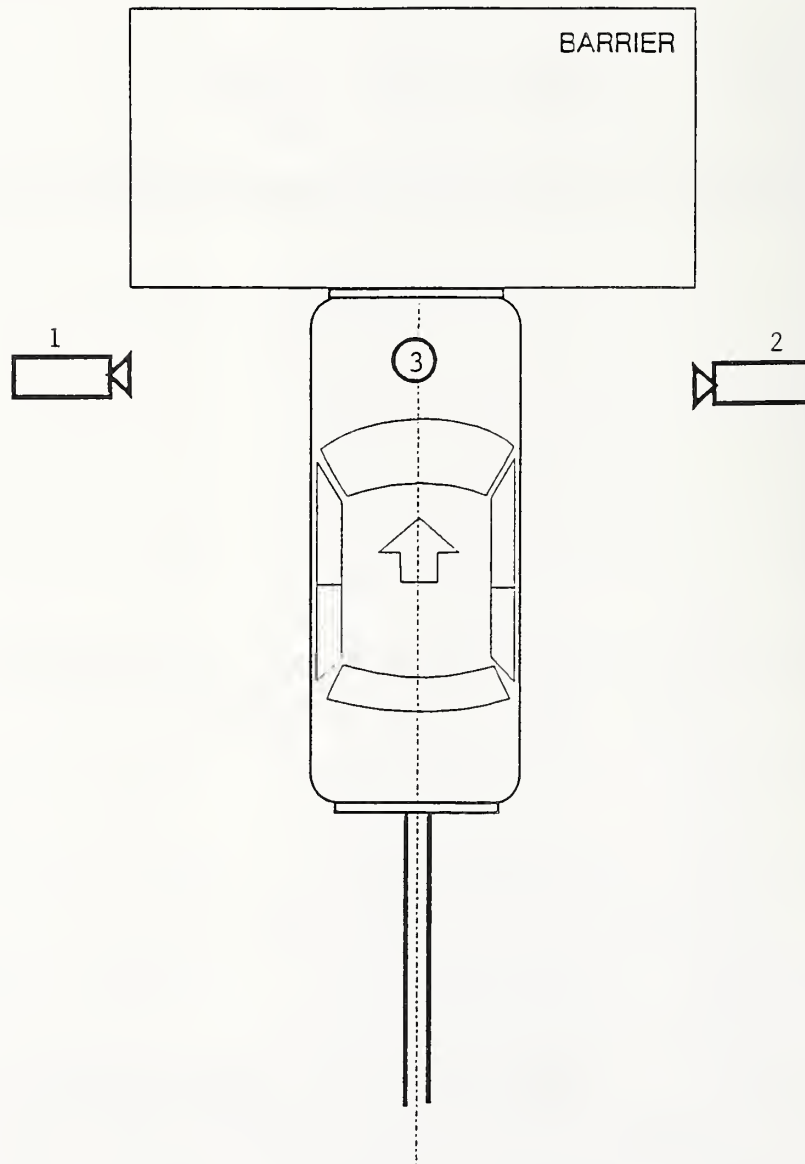


SIDE VIEW



BOTTOM VIEW

Figure 2 Camera Positions



Section 3.0

Test 950119-1 Summary

Table 3 Test Conditions

Test No. 950119-1

Date of test: 01/19/95

Time of test: 09:30

Ambient temperature at impact area: 21° C

Intended impact velocity: 8.0 kph

Actual impact velocity: Primary = 8.5 kph
 Secondary = 8.5 kph

Subject Vehicle Data

Length of direct contact damage: 671 mm

Maximum cumulative crush at
vehicle bumper height: 5 mm

Vehicle Attitudes:

Post-Test: LF: 928; RF: 921; LR: 605; RR: 590

All distance measurements are in millimeters.

Table 4 Vehicle Crush At Vehicle Bumper Height

Test No. 950119-1

FL	=	529
C1	=	3
C2	=	-4
C3	=	3
C4	=	-7
C5	=	-8
C6	=	-8

NOTE: FL is the post-test length of the damaged surface.

Measurements C1 - C6 were spaced equally apart over the post-impact length of the damaged surface. This distance is defined as length "FL" on the vehicle crush profile plot.

All measurements are in millimeters.

FIGURE 3
VEHICLE PROFILE AT BUMPER HEIGHT
TEST 1

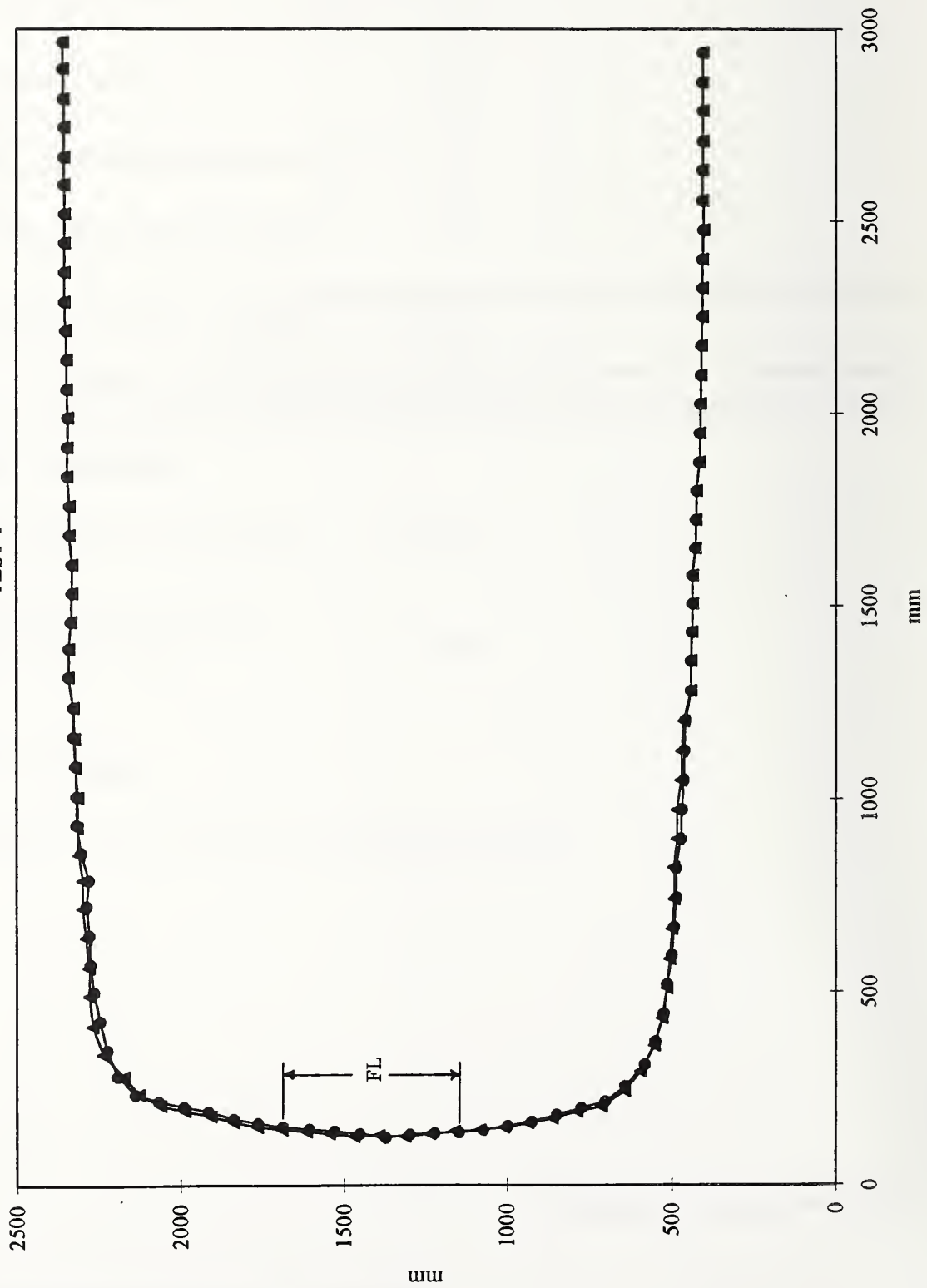


Table 5 Impacted Vehicle Measurements

Test No.: 950119-1

Vehicle Make/Model: Chevrolet/Caprice

No.	Type of measurement	Pre-test	Post-test	Diff.
X1	Total length of vehicle at centerline	5329	5324	5
X2	Rear surface of vehicle to front of engine block	4415	4415	0
X3	Rear surface of vehicle to firewall	4014	4014	0
X4	Rear surface of vehicle to upper leading edge of right door	3707	3707	0
X5	Rear surface of vehicle to upper leading edge of left door	3719	3719	0
X6	Rear surface of vehicle to lower leading edge of right door	3692	3692	0
X7	Rear surface of vehicle to lower leading edge of left door	3699	3699	0
X8	Rear surface of vehicle to upper trailing edge of right door	2493	2493	0
X9	Rear surface of vehicle to upper trailing edge of left door	2502	2502	0
X10	Rear surface of vehicle to lower trailing edge of right door	2524	2524	0
X11	Rear surface of vehicle to lower trailing edge of left door	2533	2533	0
X12	Rear surface of vehicle to bottom of "A" post on right side	3580	3580	0
X13	Rear surface of vehicle to bottom of "A" post on left side	3606	3606	0
X14	Rear surface of vehicle to firewall - right side	3920	3920	0
X15	Rear surface of vehicle to firewall - left side	3895	3895	0
X16	Rear surface of vehicle to steering wheel center	3060	3060	0
X17	Center of steering column to "A" post	298	298	0
X18	Center of steering column to headliner	414	414	0
X19	Rear surface of vehicle to right side of front bumper	5230	5232	-2
X20	Rear surface of vehicle to left side of front bumper	5225	5236	-11
X21	Length of engine block	495	495	0

All measurements are in millimeters.

Table 6 Vehicle Accelerometer Locations And Data Summary

TEST NUMBER: 950119-1 No. LOCATION	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
1 VEHICLE CENTER OF GRAVITY	3114 mm	50 mm	572 mm		
LONGITUDINAL				0.7 g @ 205.4 ms	4.4 g @ 60.2 ms
LATERAL				1.1 g @ 248.6 ms	0.6 g @ 60.8 ms
VERTICAL				2.3 g @ 72.5 ms	3.4 g @ 159.0 ms
RESULTANT				4.9 g @ 72.2 ms	
2 LEFT REAR SEAT	2115 mm	715 mm	500 mm		
LONGITUDINAL				0.5 g @ 214.0 ms	3.7 g @ 71.1 ms
LATERAL				0.5 g @ 102.4 ms	0.5 g @ 160.6 ms
3 RIGHT REAR SEAT	2164 mm	-709 mm	500 mm		
LONGITUDINAL				1.1 g @ 144.6 ms	3.4 g @ 70.7 ms
LATERAL				1.0 g @ 29.2 ms	0.5 g @ 298.2 ms
4 LEFT FRONT SILL	3238 mm	730 mm	541 mm		
LONGITUDINAL				0.7 g @ 205.0 ms	4.3 g @ 59.7 ms
LATERAL				1.0 g @ 242.6 ms	1.2 g @ 93.4 ms
5 RIGHT FRONT SILL	3184 mm	-680 mm	524 mm		
LONGITUDINAL				0.6 g @ 249.1 ms	4.5 g @ 59.4 ms
LATERAL				1.0 g @ 50.1 ms	0.7 g @ 242.6 ms

REFERENCE: X: + FORWARD FROM VEHICLE'S REAR BUMPER
Y: + LEFTWARD FROM VEHICLE'S LONGITUDINAL CENTERLINE
Z: + UPWARD FROM GROUND LEVEL

Table 7 Camera Information

Test No. 950119-1

Camera Number	Location	Type	Lens (mm)	Speed (fps)	Purpose of Camera Data
1	Left tight	Photosonic	25	1008	Impact overall
2	Right tight	Photosonic	25	1005	Impact overall
3	Overhead	Photosonic	25	1000	Impact overall

Section 4.0

Test 950119-2 Summary

Table 8 Test Conditions

Test No. 950119-2

Date of test: 01/19/95

Time of test: 10:35

Ambient temperature at impact area: 21° C

Intended impact velocity: 16.0 kph

Actual impact velocity:	Primary	= 15.4 kph
	Secondary	= 15.4 kph

Subject Vehicle Data

Length of direct contact damage: 1581 mm

Maximum cumulative crush at
vehicle bumper height: 49 mm

Vehicle Attitudes:

Post-test: LF: 934; RF: 930; LR: 595; RR: 587

All distance measurements are in millimeters.

Table 9 Vehicle Crush At Vehicle Bumper Height

Test No. 950119-2

FL	=	1200
C1	=	17
C2	=	21
C3	=	42
C4	=	43
C5	=	34
C6	=	12

NOTE: FL is the post-test length of the damaged surface.

Measurements C1 - C6 were spaced equally apart over the post-impact length of the damaged surface. This distance is defined as length "FL" on the vehicle crush profile plot.

All measurements are in millimeters.

FIGURE 4
VEHICLE PROFILE AT BUMPER HEIGHT
TEST 2

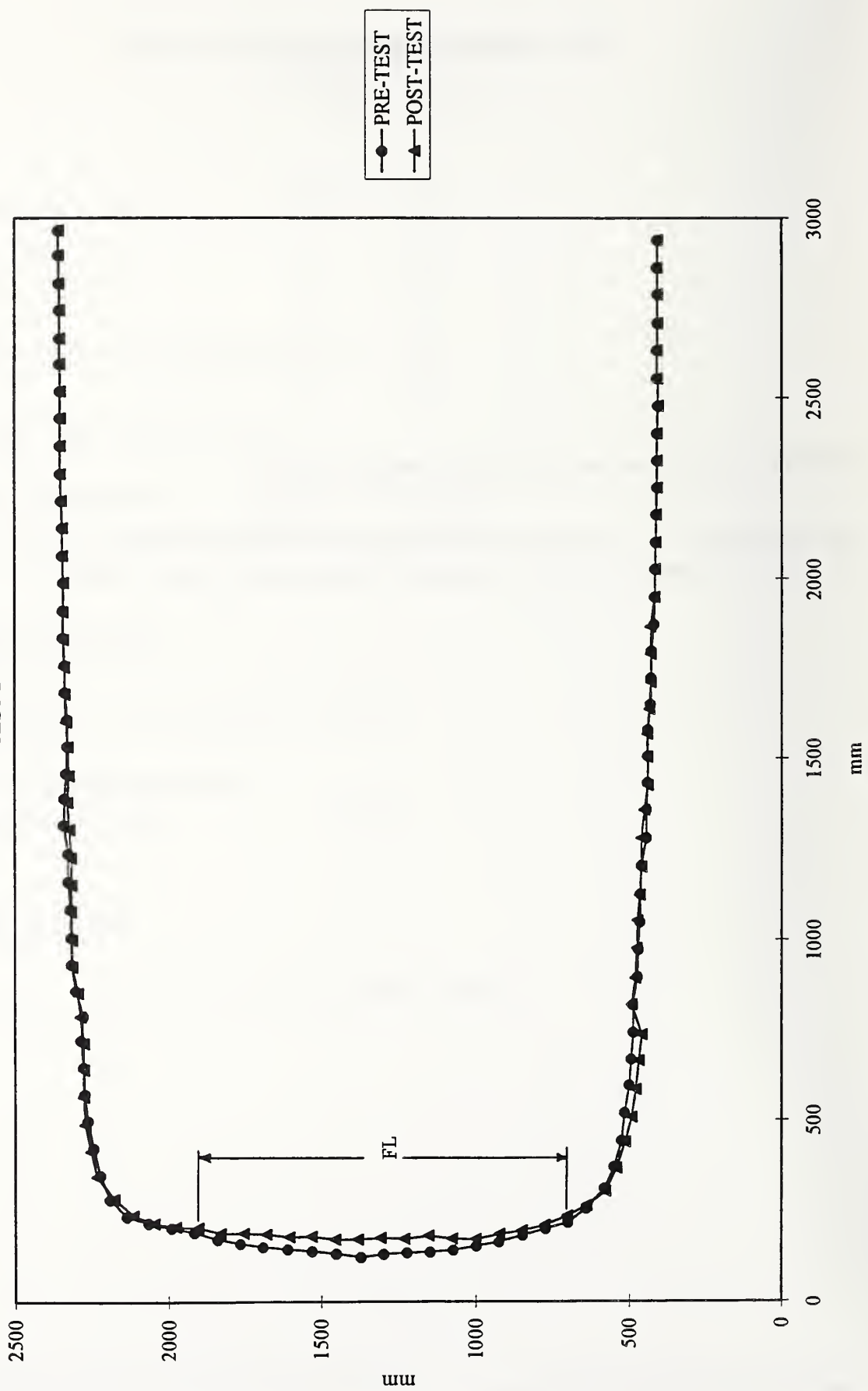


Table 10 Impacted Vehicle Measurements

Test No.: 950119-2

Vehicle Make/Model: Chevrolet/Caprice

No.	Type of measurement	Pre-test	Post-test	Diff.
X1	Total length of vehicle at centerline	5324	5309	15
X2	Rear surface of vehicle to front of engine block	4415	NA ¹	NA ¹
X3	Rear surface of vehicle to firewall	4014	NA ¹	NA ¹
X4	Rear surface of vehicle to upper leading edge of right door	3707	3675	32
X5	Rear surface of vehicle to upper leading edge of left door	3719	3712	7
X6	Rear surface of vehicle to lower leading edge of right door	3692	3679	13
X7	Rear surface of vehicle to lower leading edge of left door	3699	3694	5
X8	Rear surface of vehicle to upper trailing edge of right door	2493	2460	33
X9	Rear surface of vehicle to upper trailing edge of left door	2502	2566	-64
X10	Rear surface of vehicle to lower trailing edge of right door	2524	2511	13
X11	Rear surface of vehicle to lower trailing edge of left door	2533	2523	10
X12	Rear surface of vehicle to bottom of "A" post on right side	3580	3578	2
X13	Rear surface of vehicle to bottom of "A" post on left side	3606	3591	15
X14	Rear surface of vehicle to firewall - right side	3920	NA ¹	NA ¹
X15	Rear surface of vehicle to firewall - left side	3895	NA ¹	NA ¹
X16	Rear surface of vehicle to steering wheel center	3060	3059	1
X17	Center of steering column to "A" post	298	344	-46
X18	Center of steering column to headliner	414	400	14
X19	Rear surface of vehicle to right side of front bumper	5232	5246	-14
X20	Rear surface of vehicle to left side of front bumper	5236	5244	-8
X21	Length of engine block	495	495	0

¹ The vehicle's crush obstructed the measurement.

All measurements are in millimeters.

Table 11 Vehicle Accelerometer Locations And Data Summary

TEST NUMBER: 950119-2 No. LOCATION	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
1 VEHICLE CENTER OF GRAVITY	3114 mm	50 mm	572 mm		
LONGITUDINAL		2.6 g	@ 27.1 ms	13.4 g	@ 31.9 ms
LATERAL		1.8 g	@ 49.6 ms	3.5 g	@ 72.9 ms
VERTICAL		18.7 g	@ 55.6 ms	7.7 g	@ 28.2 ms
RESULTANT		22.5 g	@ 55.5 ms		
2 LEFT REAR SEAT	2115 mm	715 mm	500 mm		
LONGITUDINAL		0.9 g	@ 26.8 ms	11.8 g	@ 54.9 ms
LATERAL		4.5 g	@ 30.9 ms	2.7 g	@ 74.0 ms
3 RIGHT REAR SEAT	2164 mm	-709 mm	500 mm		
LONGITUDINAL		1.6 g	@ 27.2 ms	12.8 g	@ 68.8 ms
LATERAL		4.9 g	@ 35.8 ms	2.2 g	@ 30.9 ms
4 LEFT FRONT SILL	3238 mm	730 mm	541 mm		
LONGITUDINAL		1.4 g	@ 26.6 ms	12.1 g	@ 55.0 ms
LATERAL		2.4 g	@ 68.0 ms	3.1 g	@ 72.8 ms
5 RIGHT FRONT SILL	3184 mm	-680 mm	524 mm		
LONGITUDINAL		1.2 g	@ 27.3 ms	13.1 g	@ 68.7 ms
LATERAL		4.6 g	@ 33.1 ms	2.5 g	@ 66.6 ms

REFERENCE: X: + FORWARD FROM VEHICLE'S REAR BUMPER
Y: + LEFTWARD FROM VEHICLE'S LONGITUDINAL CENTERLINE
Z: + UPWARD FROM GROUND LEVEL

Table 12 Camera Information

Test No. 950119-2

Camera Number	Location	Type	Lens (mm)	Speed (fps)	Purpose of Camera Data
1	Left tight	Photosonic	25	1002	Impact overall
2	Right tight	Photosonic	25	1005	Impact overall
3	Overhead	Photosonic	25	1000	Impact overall



Section 5.0

Test 950119-3 Summary

Table 13 Test Conditions

Test No. 950119-3

Date of test: 01/19/95

Time of test: 11:25

Ambient temperature at impact area: 21° C

Intended impact velocity: 16.0 kph

Actual impact velocity:

Primary	= 15.0 kph
Secondary	= 15.0 kph

Subject Vehicle Data

Length of direct contact damage: 1581 mm

Maximum cumulative crush at vehicle bumper height: 225 mm

Vehicle Attitudes:

Post-test: LF: 938; RF: 934; LR: 598; RR: 582

All distance measurements are in millimeters.

Table 14 Vehicle Crush At Vehicle Bumper Height

Test No. 950119-3

FL	=	1389
C1	=	134
C2	=	191
C3	=	200
C4	=	198
C5	=	206
C6	=	153

NOTE: FL is post-test length of damaged surface.

Measurements C1 - C6 were spaced equally apart over the post-impact length of the damaged surface. This distance is defined as length "FL" on the vehicle crush profile plot.

All measurements are in millimeters.

FIGURE 5
VEHICLE PROFILE AT BUMPER HEIGHT
TEST 3

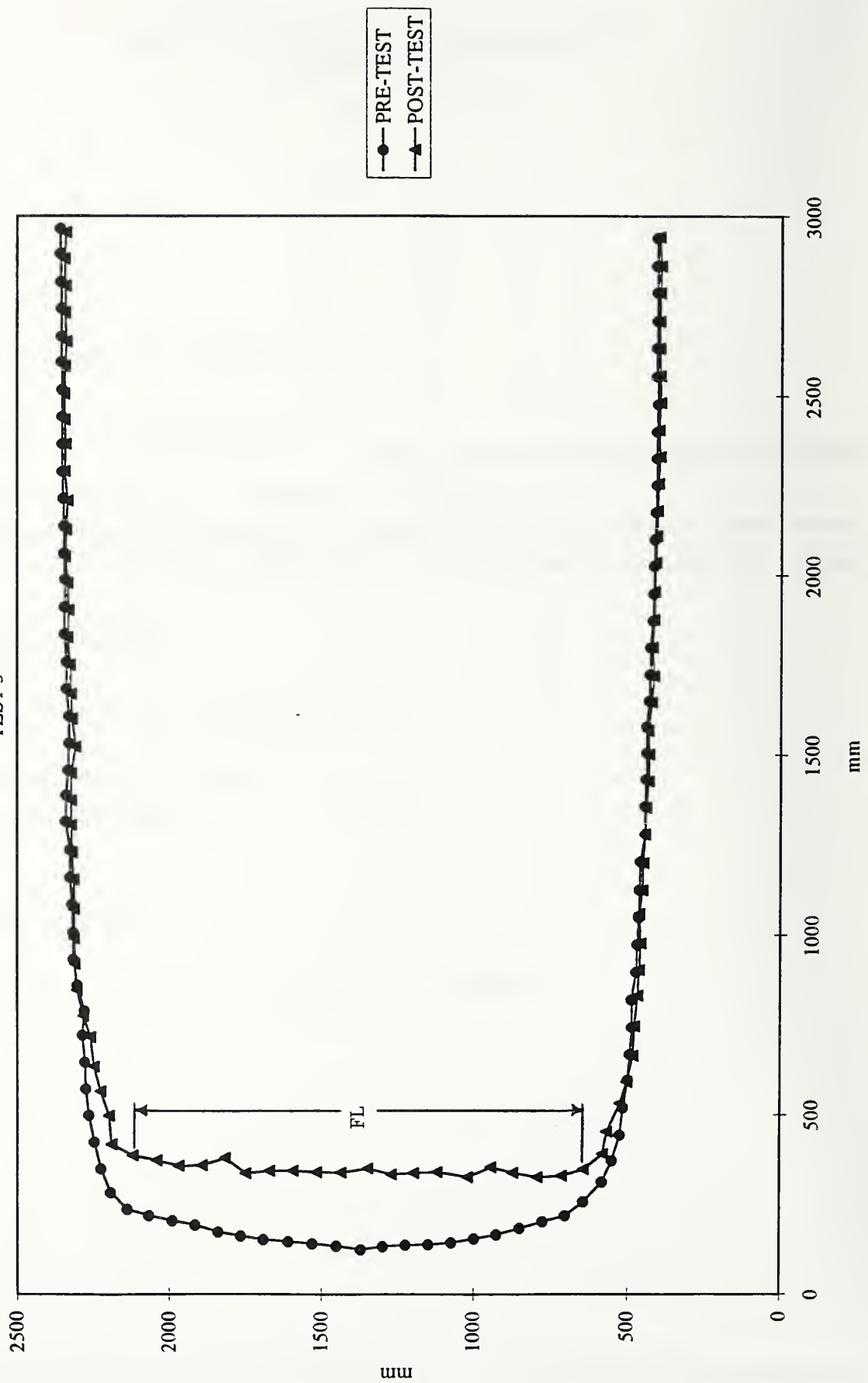


Table 15 Impacted Vehicle Measurements

Test No.: 950119-3

Vehicle Make/Model: Chevrolet/Caprice

No.	Type of measurement	Pre-test	Post-test	Diff.
X1	Total length of vehicle at centerline	5309	5096	213
X2	Rear surface of vehicle to front of engine block	NA ¹	NA ¹	NA ¹
X3	Rear surface of vehicle to firewall	NA ¹	NA ¹	NA ¹
X4	Rear surface of vehicle to upper leading edge of right door	3675	3744	-69
X5	Rear surface of vehicle to upper leading edge of left door	3712	3703	9
X6	Rear surface of vehicle to lower leading edge of right door	3679	3693	-14
X7	Rear surface of vehicle to lower leading edge of left door	3694	3700	-6
X8	Rear surface of vehicle to upper trailing edge of right door	2460	2524	-64
X9	Rear surface of vehicle to upper trailing edge of left door	2566	2486	80
X10	Rear surface of vehicle to lower trailing edge of right door	2511	2524	-13
X11	Rear surface of vehicle to lower trailing edge of left door	2523	2528	-5
X12	Rear surface of vehicle to bottom of "A" post on right side	3578	3614	-36
X13	Rear surface of vehicle to bottom of "A" post on left side	3591	3592	-1
X14	Rear surface of vehicle to firewall - right side	NA ¹	NA ¹	NA ¹
X15	Rear surface of vehicle to firewall - left side	NA ¹	NA ¹	NA ¹
X16	Rear surface of vehicle to steering wheel center	3059	3100	-41
X17	Center of steering column to "A" post	344	344	0
X18	Center of steering column to headliner	400	413	-13
X19	Rear surface of vehicle to right side of front bumper	5246	5027	219
X20	Rear surface of vehicle to left side of front bumper	5244	5054	190
X21	Length of engine block	495	495	0

¹ The vehicle's crush obstructed the measurement.

All measurements are in millimeters.

Table 16 Vehicle Accelerometer Locations And Data Summary

TEST NUMBER: 950119-3 No. LOCATION	X	Y	Z	POSITIVE		NEGATIVE	
				DIRECTION		DIRECTION	
1 VEHICLE CENTER OF GRAVITY	3114 mm	50 mm	572 mm				
LONGITUDINAL				2.9 g	@ 105.4 ms	19.0 g	@ 46.0 ms
LATERAL				3.4 g	@ 77.4 ms	2.8 g	@ 68.0 ms
VERTICAL				38.3 g	@ 67.4 ms	15.0 g	@ 53.6 ms
RESULTANT				40.0 g	@ 67.4 ms		
2 LEFT REAR SEAT	2115 mm	715 mm	500 mm				
LONGITUDINAL				1.0 g	@ 115.4 ms	18.6 g	@ 58.9 ms
LATERAL				3.7 g	@ 57.2 ms	3.3 g	@ 49.8 ms
3 RIGHT REAR SEAT	2164 mm	-709 mm	500 mm				
LONGITUDINAL				1.1 g	@ 116.2 ms	17.3 g	@ 46.1 ms
LATERAL				5.1 g	@ 49.5 ms	1.3 g	@ 111.4 ms
4 LEFT FRONT SILL	3238 mm	730 mm	541 mm				
LONGITUDINAL				1.3 g	@ 189.4 ms	18.8 g	@ 58.5 ms
LATERAL				4.2 g	@ 74.1 ms	4.5 g	@ 47.7 ms
5 RIGHT FRONT SILL	3184 mm	-680 mm	524 mm				
LONGITUDINAL				1.3 g	@ 255.3 ms	17.2 g	@ 46.0 ms
LATERAL				5.4 g	@ 47.2 ms	1.8 g	@ 52.1 ms

REFERENCE: X: + FORWARD FROM VEHICLE'S REAR BUMPER
Y: + LEFTWARD FROM VEHICLE'S LONGITUDINAL CENTERLINE
Z: + UPWARD FROM GROUND LEVEL

Table 17 Camera Information

Test No. 950119-3

<u>Camera Number</u>	<u>Location</u>	<u>Type</u>	<u>Lens (mm)</u>	<u>Speed (fps)</u>	<u>Purpose of Camera Data</u>
1	Left tight	Photosonic	25	1000	Impact overall
2	Right tight	Photosonic	25	1005	Impact overall
3	Overhead	Photosonic	25	1000	Impact overall



Section 6.0

Test 950119-4 Summary

Table 18 Test Conditions

Test No. 950119-4

Date of test: 01/19/95

Time of test: 13:35

Ambient temperature at impact area: 21° C

Intended impact velocity: 32.2 kph

Actual impact velocity:	Primary	= 31.5 kph
	Secondary	= 31.5 kph

Subject Vehicle Data

Length of direct contact damage: 1600 mm

Maximum cumulative crush at
vehicle bumper height: 499 mm

Vehicle Attitudes:

Post-test: LF: 999; RF: 1010; LR: 580; RR: 593

All distance measurements are in millimeters.

Table 19 Vehicle Crush At Vehicle Bumper Height

Test No. 950119-4

FL	=	1695
C1	=	55
C2	=	401
C3	=	456
C4	=	481
C5	=	460
C6	=	391

NOTE: FL is post-test length of damaged surface.

Measurements C1 - C6 were spaced equally apart over the post-impact length of the damaged surface. This distance is defined as length "FL" on the vehicle crush profile plot.

All measurements are in millimeters.

FIGURE 6
VEHICLE PROFILE AT BUMPER HEIGHT
TEST 4

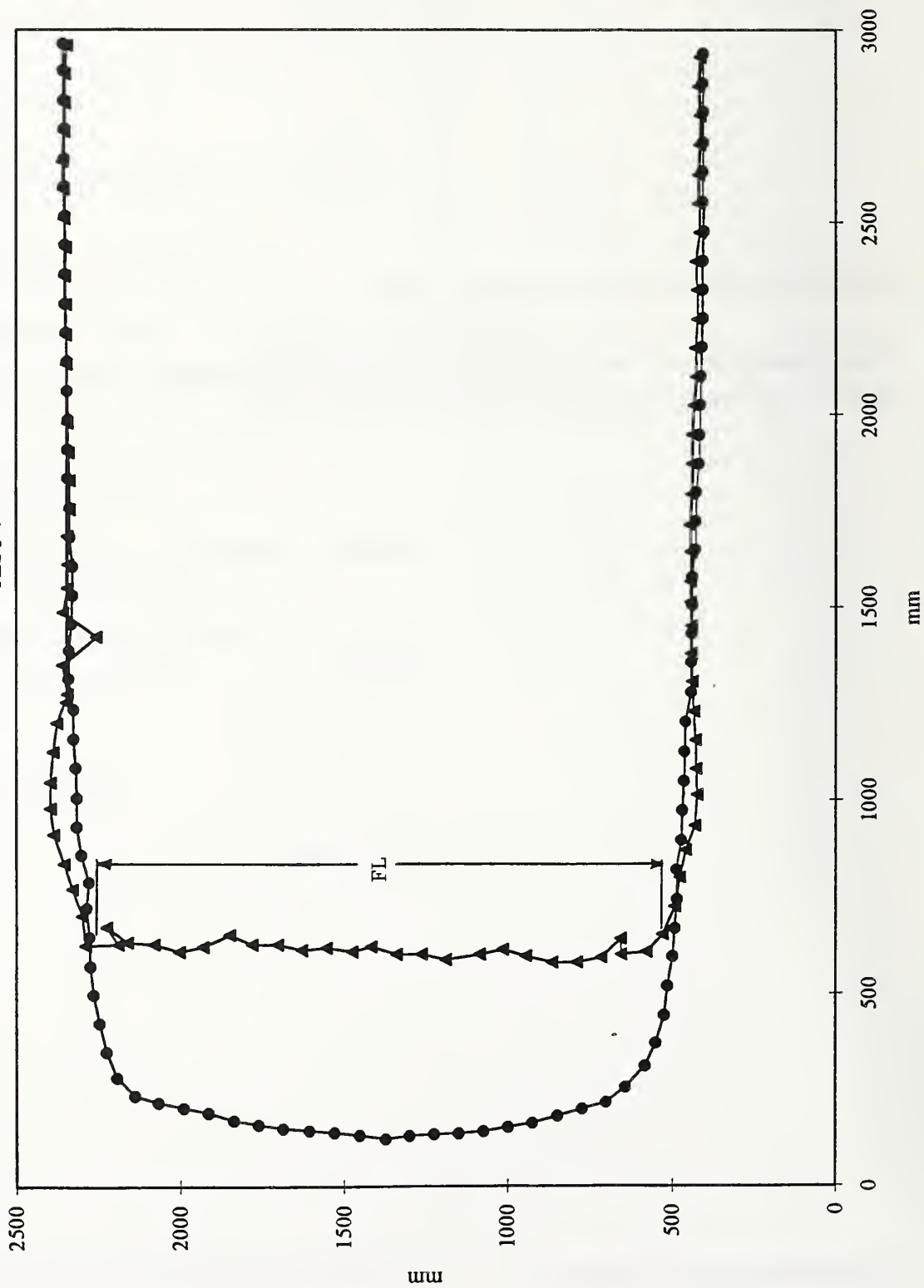


Table 20 Impacted Vehicle Measurements

Test No.: 950119-4

Vehicle Make/Model: Chevrolet/Caprice

No.	Type of measurement	Pre-test	Post-test	Diff.
X1	Total length of vehicle at centerline	5096	4822	274
X2	Rear surface of vehicle to front of engine block	NA ¹	NA ¹	NA ¹
X3	Rear surface of vehicle to firewall	NA ¹	NA ¹	NA ¹
X4	Rear surface of vehicle to upper leading edge of right door	3744	3658	86
X5	Rear surface of vehicle to upper leading edge of left door	3703	3683	20
X6	Rear surface of vehicle to lower leading edge of right door	3693	3719	-26
X7	Rear surface of vehicle to lower leading edge of left door	3700	3707	-7
X8	Rear surface of vehicle to upper trailing edge of right door	2524	2454	70
X9	Rear surface of vehicle to upper trailing edge of left door	2486	2486	0
X10	Rear surface of vehicle to lower trailing edge of right door	2524	2548	-24
X11	Rear surface of vehicle to lower trailing edge of left door	2528	2529	-1
X12	Rear surface of vehicle to bottom of "A" post on right side	3614	3579	35
X13	Rear surface of vehicle to bottom of "A" post on left side	3592	3600	-8
X14	Rear surface of vehicle to firewall - right side	NA ¹	NA ¹	NA ¹
X15	Rear surface of vehicle to firewall - left side	NA ¹	NA ¹	NA ¹
X16	Rear surface of vehicle to steering wheel center	3100	3091	9
X17	Center of steering column to "A" post	344	334	10
X18	Center of steering column to headliner	413	417	-4
X19	Rear surface of vehicle to right side of front bumper	5027	4770	257
X20	Rear surface of vehicle to left side of front bumper	5054	4802	252
X21	Length of engine block	495	495	0

¹ The vehicle's crush obstructed the measurement.

All measurements are in millimeters.

Table 21 Vehicle Accelerometer Locations And Data Summary

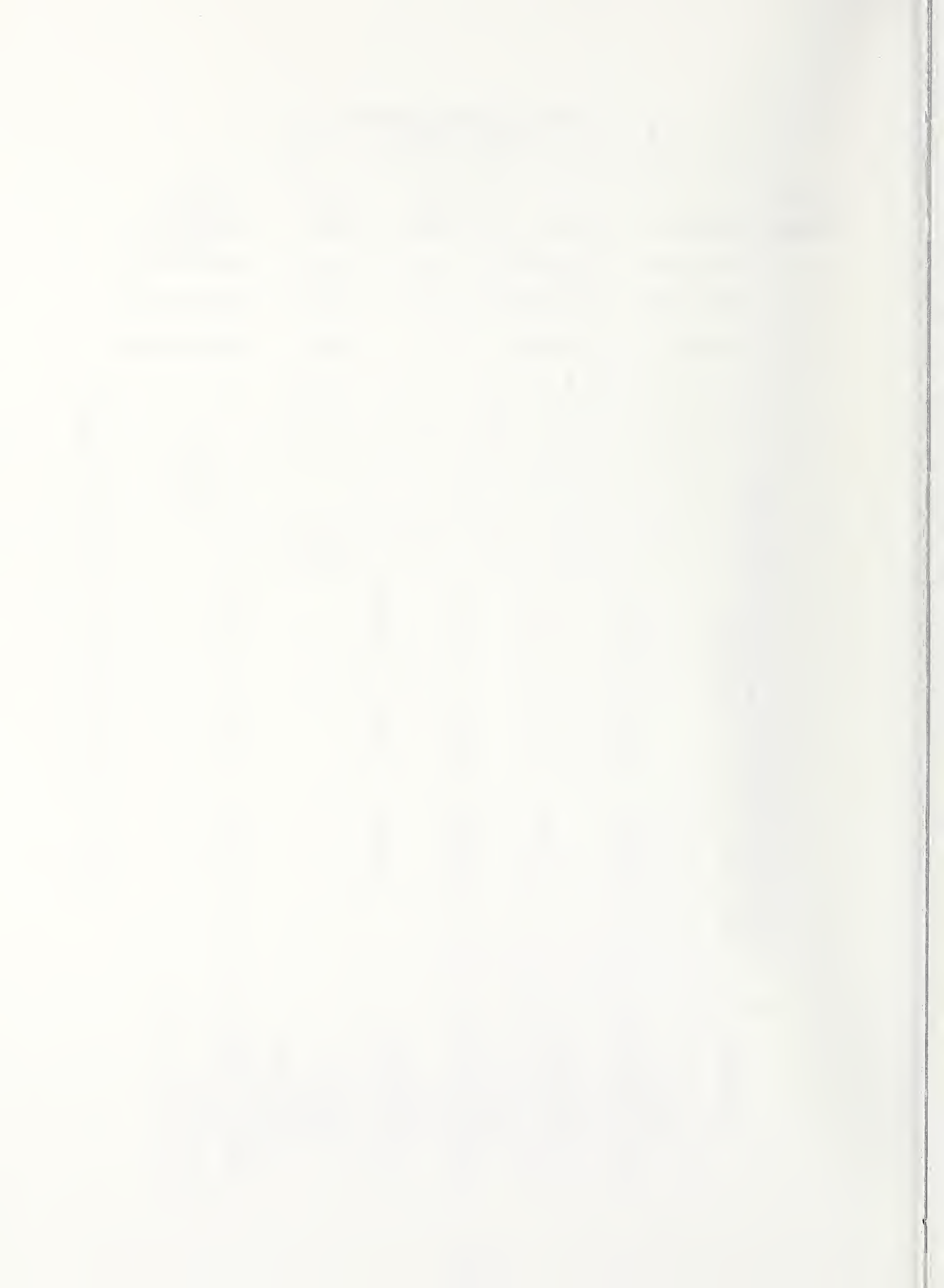
TEST NUMBER: 950119-4 No. LOCATION	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
1 VEHICLE CENTER OF GRAVITY	3114 mm	50 mm	572 mm		
LONGITUDINAL				15.6 g @ 35.4 ms	35.5 g @ 30.5 ms
LATERAL				9.3 g @ 37.8 ms	5.7 g @ 32.5 ms
VERTICAL				18.6 g @ 45.4 ms	30.2 g @ 38.2 ms
RESULTANT				38.4 g @ 30.6 ms	
2 LEFT REAR SEAT	2115 mm	715 mm	500 mm		
LONGITUDINAL				4.0 g @ 35.4 ms	28.5 g @ 30.4 ms
LATERAL				9.1 g @ 40.4 ms	13.1 g @ 34.2 ms
3 RIGHT REAR SEAT	2164 mm	-709 mm	500 mm		
LONGITUDINAL				5.1 g @ 35.5 ms	27.0 g @ 30.6 ms
LATERAL				12.5 g @ 34.2 ms	7.4 g @ 39.4 ms
4 LEFT FRONT SILL	3238 mm	730 mm	541 mm		
LONGITUDINAL				5.4 g @ 35.2 ms	28.3 g @ 30.2 ms
LATERAL				9.0 g @ 37.5 ms	9.6 g @ 31.9 ms
5 RIGHT FRONT SILL	3184 mm	-680 mm	524 mm		
LONGITUDINAL				2.3 g @ 35.5 ms	25.8 g @ 30.3 ms
LATERAL				14.5 g @ 31.4 ms	10.1 g @ 35.9 ms

REFERENCE: X: + FORWARD FROM VEHICLE'S REAR BUMPER
Y: + LEFTWARD FROM VEHICLE'S LONGITUDINAL CENTERLINE
Z: + UPWARD FROM GROUND LEVEL

Table 22 Camera Information

Test No. 950119-4

Camera Number	Location	Type	Lens (mm)	Speed (fps)	Purpose of Camera Data
1	Left tight	Photosonic	25	1002	Impact overall
2	Right tight	Photosonic	25	1008	Impact overall
3	Overhead	Photosonic	25	998	Impact overall



Section 7.0

Test 950119-5 Summary

Table 23 Test Conditions

Test No. 950119-5

Date of test: 01/19/95

Time of test: 15:01

Ambient temperature at impact area: 21° C

Intended impact velocity: 56.3 kph

Actual impact velocity:	Primary	=	55.4 kph
	Secondary	=	55.5 kph

Subject Vehicle Data

Length of direct contact damage: 1600 mm

Maximum cumulative crush at
vehicle bumper height: 963 mm

Vehicle Attitudes:

Post-test: LF: 1025; RF: 1078; LR: 553; RR: 548

All distance measurements are in millimeters.

Table 24 Vehicle Crush At Vehicle Bumper Height

Test No. 950119-5

FL	=	2172
C1	=	199
C2	=	617
C3	=	917
C4	=	943
C5	=	887
C6	=	303

NOTE: FL is post-test length of damaged surface.

Measurements C1 - C6 were spaced equally apart over the post-impact length of the damaged surface. This distance is defined as length "FL" on the vehicle crush profile plot.

All measurements are in millimeters.

FIGURE 7
VEHICLE PROFILE AT BUMPER HEIGHT
TEST 5

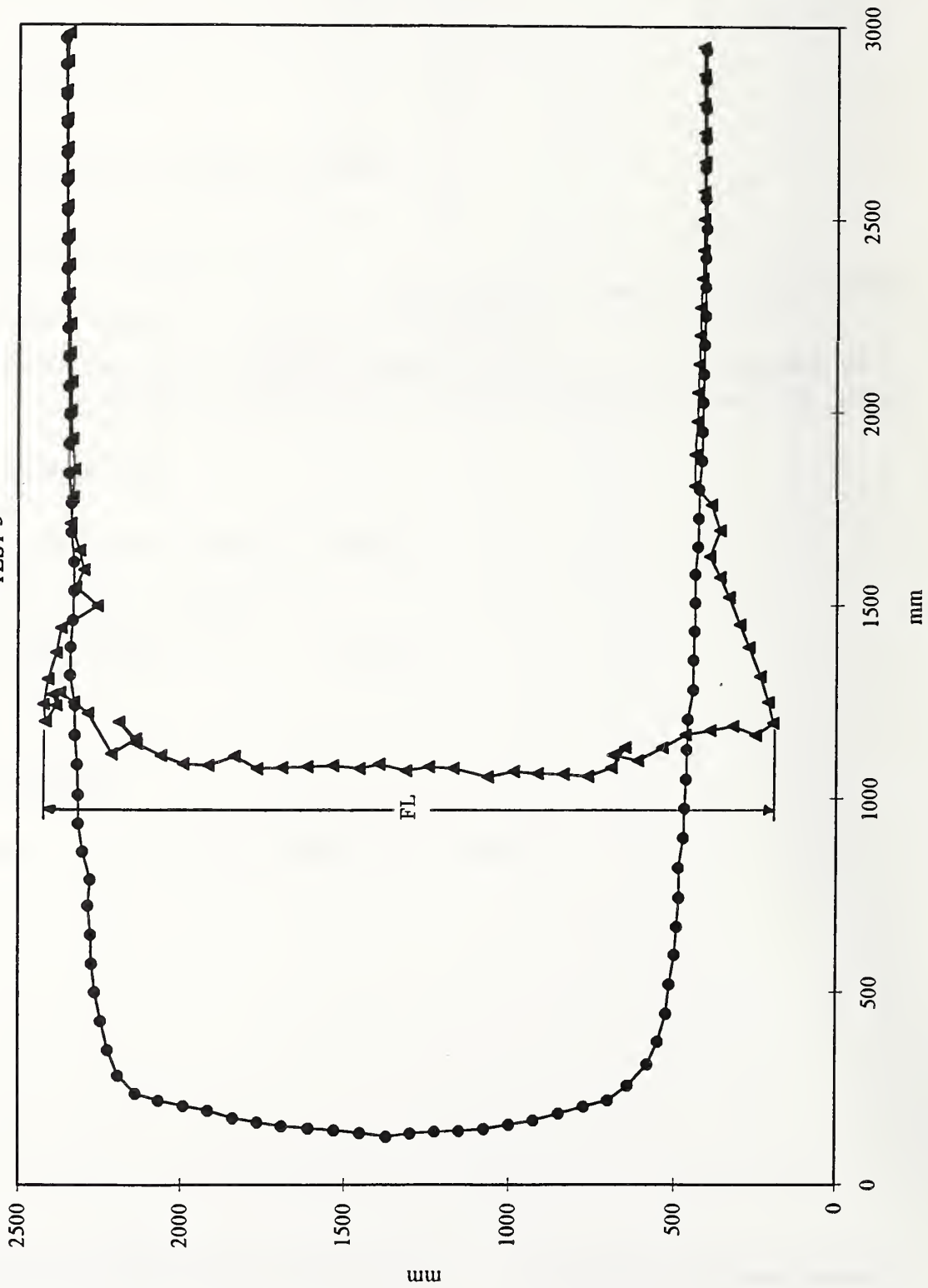


Table 25 Impacted Vehicle Measurements

Test No.: 950119-5

Vehicle Make/Model: Chevrolet/Caprice

No.	Type of measurement	Pre-test	Post-test	Diff.
X1	Total length of vehicle at centerline	4822	4358	464
X2	Rear surface of vehicle to front of engine block	NA ¹	NA ¹	NA ¹
X3	Rear surface of vehicle to firewall	NA ¹	NA ¹	NA ¹
X4	Rear surface of vehicle to upper leading edge of right door	3658	3672	-14
X5	Rear surface of vehicle to upper leading edge of left door	3683	3684	-1
X6	Rear surface of vehicle to lower leading edge of right door	3719	3684	35
X7	Rear surface of vehicle to lower leading edge of left door	3707	3660	47
X8	Rear surface of vehicle to upper trailing edge of right door	2454	2481	-27
X9	Rear surface of vehicle to upper trailing edge of left door	2486	2480	6
X10	Rear surface of vehicle to lower trailing edge of right door	2548	2527	21
X11	Rear surface of vehicle to lower trailing edge of left door	2529	2522	7
X12	Rear surface of vehicle to bottom of "A" post on right side	3579	3522	57
X13	Rear surface of vehicle to bottom of "A" post on left side	3600	3562	38
X14	Rear surface of vehicle to firewall - right side	NA ¹	3885	NA ¹
X15	Rear surface of vehicle to firewall - left side	NA ¹	3830	NA ¹
X16	Rear surface of vehicle to steering wheel center	3091	2964	127
X17	Center of steering column to "A" post	334	289	45
X18	Center of steering column to headliner	417	351	66
X19	Rear surface of vehicle to right side of front bumper	4770	4250	520
X20	Rear surface of vehicle to left side of front bumper	4802	4314	488
X21	Length of engine block	495	495	0

¹ The vehicle's crush obstructed the measurement.

All measurements are in millimeters.

Table 26 Vehicle Accelerometer Locations And Data Summary

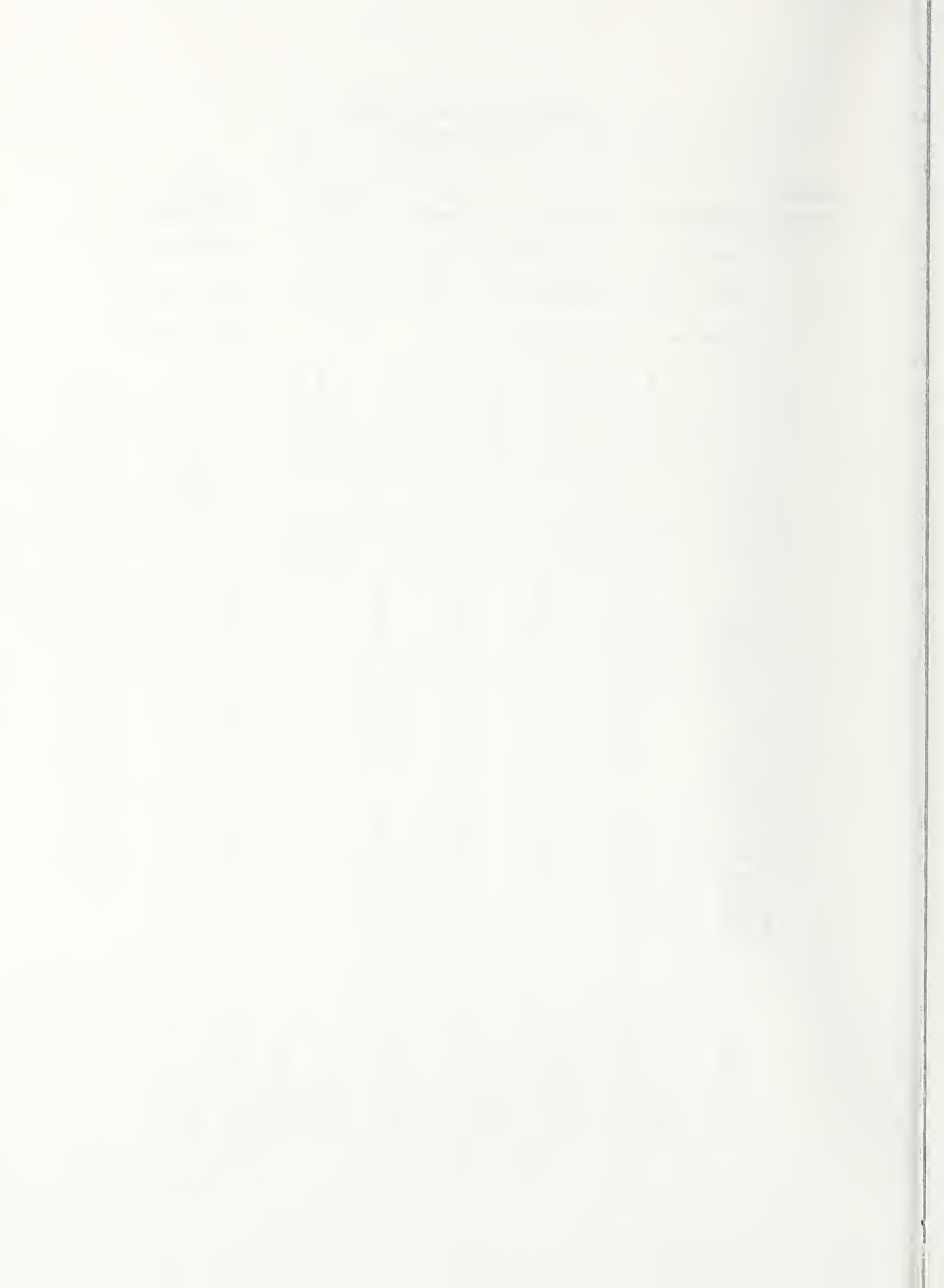
TEST NUMBER: 950119-5 No. LOCATION	X	Y	Z	POSITIVE DIRECTION	NEGATIVE DIRECTION
1 VEHICLE CENTER OF GRAVITY	3114 mm	50 mm	572 mm		
LONGITUDINAL				48.7 g @ 34.2 ms	93.7 g @ 24.3 ms
LATERAL				24.4 g @ 29.5 ms	30.4 g @ 35.0 ms
VERTICAL				128.0 g @ 34.0 ms	138.6 g @ 25.4 ms
RESULTANT				165.0 g @ 25.3 ms	
2 LEFT REAR SEAT	2115 mm	715 mm	500 mm		
LONGITUDINAL				1.9 g @ 142.6 ms	44.1 g @ 32.8 ms
LATERAL				11.0 g @ 65.0 ms	13.3 g @ 13.0 ms
3 RIGHT REAR SEAT	2164 mm	-709 mm	500 mm		
LONGITUDINAL				1.9 g @ 145.8 ms	41.5 g @ 36.2 ms
LATERAL				19.4 g @ 51.9 ms	9.7 g @ 18.4 ms
4 LEFT FRONT SILL	3238 mm	730 mm	541 mm		
LONGITUDINAL				2.4 g @ 143.9 ms	45.0 g @ 32.8 ms
LATERAL				19.1 g @ 47.0 ms	15.2 g @ 22.7 ms
5 RIGHT FRONT SILL	3184 mm	-680 mm	524 mm		
LONGITUDINAL				1.8 g @ 152.3 ms	39.4 g @ 35.5 ms
LATERAL				20.8 g @ 52.7 ms	27.3 g @ 43.0 ms

REFERENCE: X: + FORWARD FROM VEHICLE'S REAR BUMPER
Y: + LEFTWARD FROM VEHICLE'S LONGITUDINAL CENTERLINE
Z: + UPWARD FROM GROUND LEVEL

Table 27 Camera Information

Test No. 950119-5

Camera Number	Location	Type	Lens (mm)	Speed (fps)	Purpose of Camera Data
1	Left tight	Photosonic	25	1000	Impact overall
2	Right tight	Photosonic	25	1010	Impact overall
3	Overhead	Photosonic	25	1000	Impact overall



Appendix A

Photographs

List of Photographs

Test No. 950119-1

- A-1. Pre-Test Left Side View
- A-2. Post-Test Left Side View
- A-3. Pre-Test Left Front Three-Quarter View
- A-4. Post-Test Left Front Three-Quarter View
- A-5. Pre-Test Front View
- A-6. Post-Test Front View
- A-7. Pre-Test Right Front Three-Quarter View
- A-8. Post-Test Right Front Three-Quarter View
- A-9. Pre-Test Right Side View
- A-10. Post-Test Right Side View
- A-11. Pre-Test Overhead View
- A-12. Post-Test Overhead View

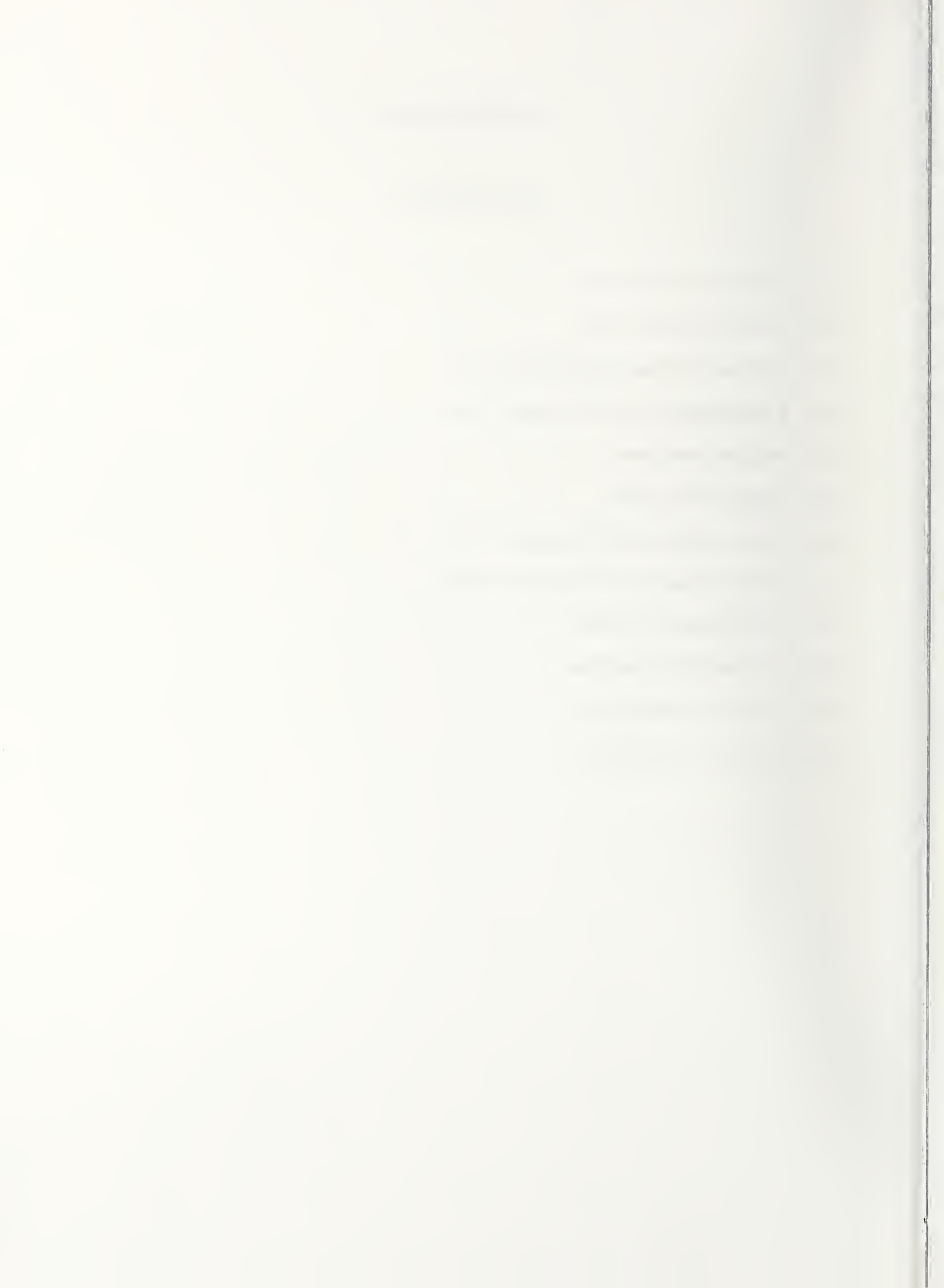




Figure A-1. Pre-Test Left Side View



Figure A-2. Post-Test Left Side View

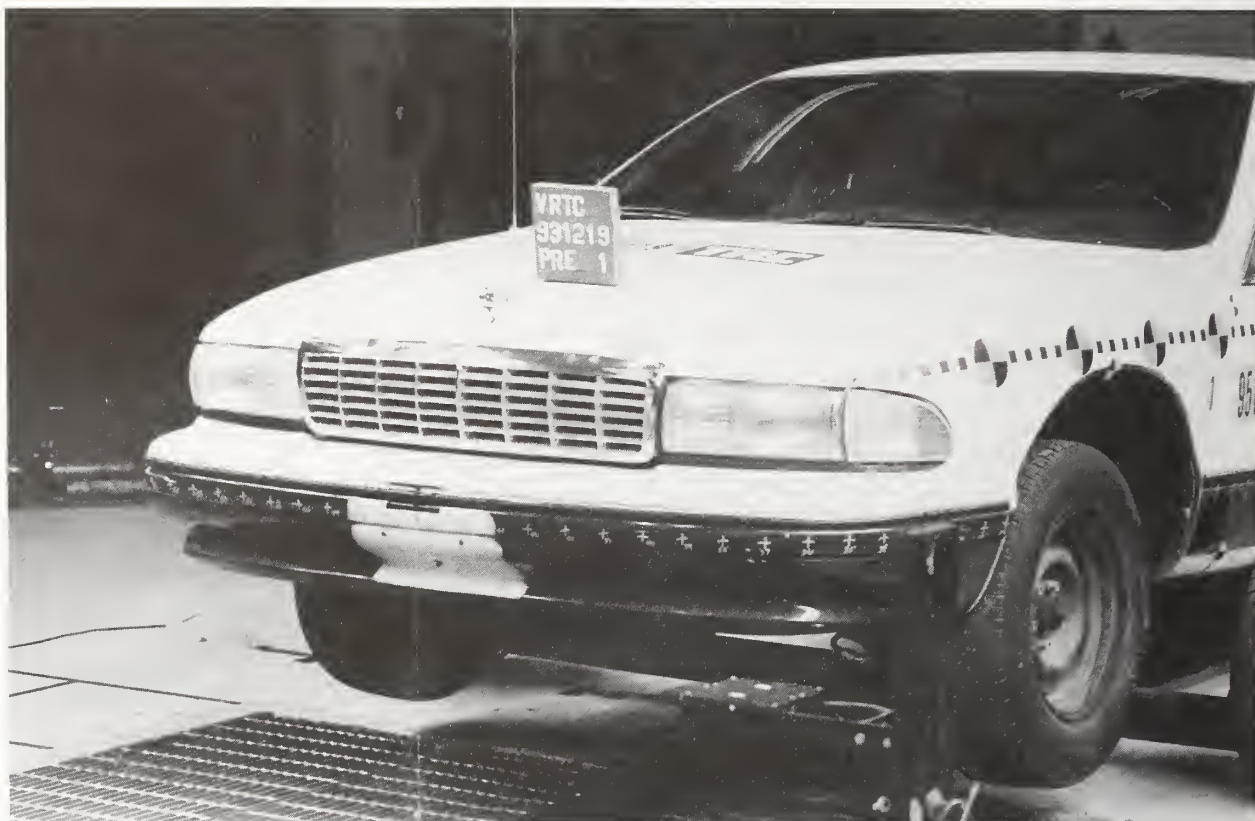


Figure A-3. Pre-Test Left Front Three-Quarter View



Figure A-4. Post-Test Left Front Three-Quarter View

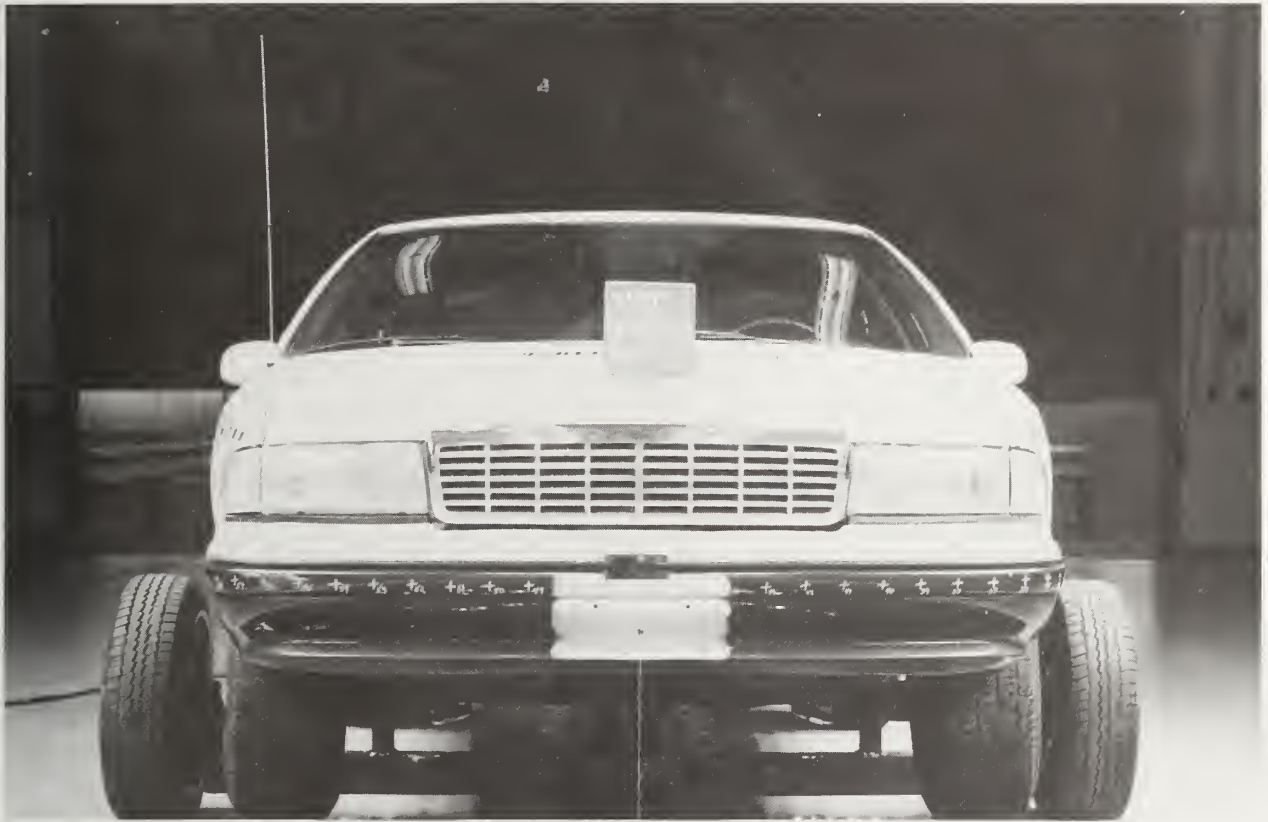


Figure A-5. Pre-Test Front View

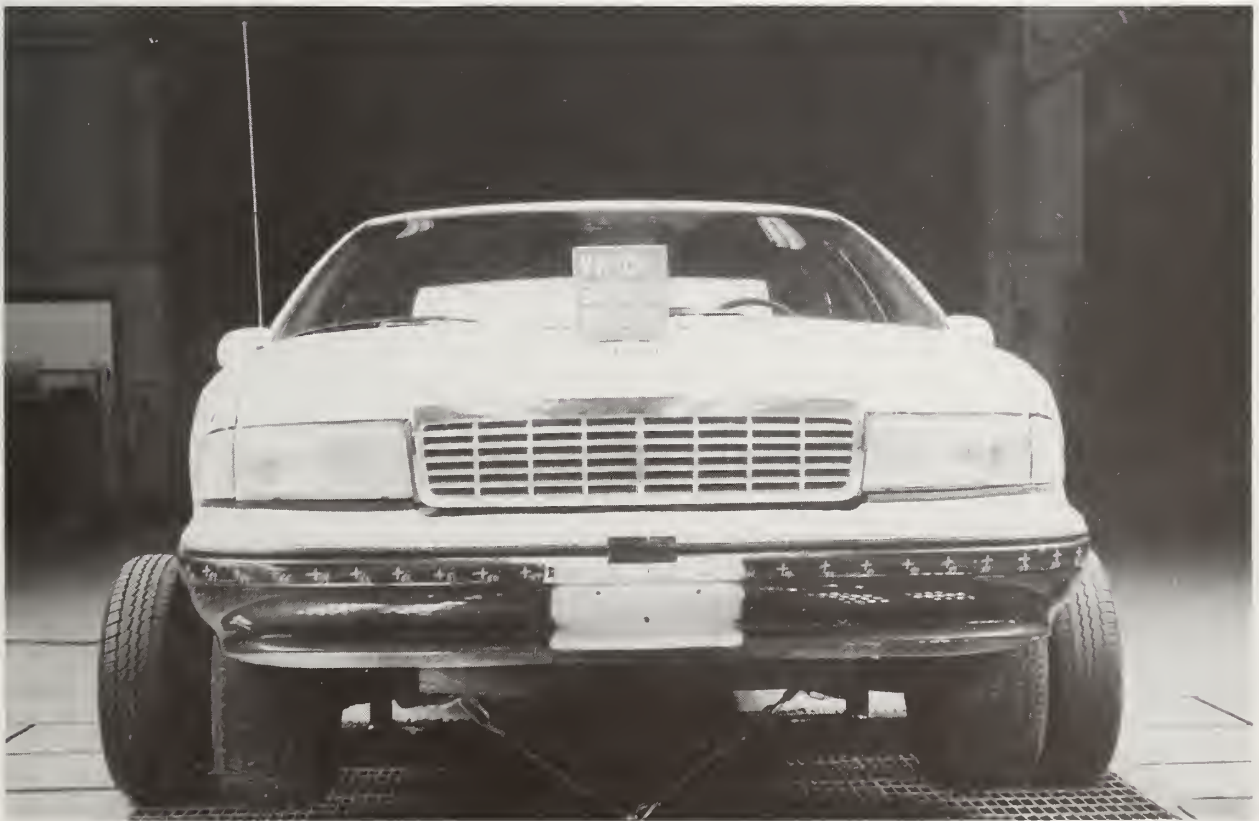


Figure A-6. Post-Test Front View

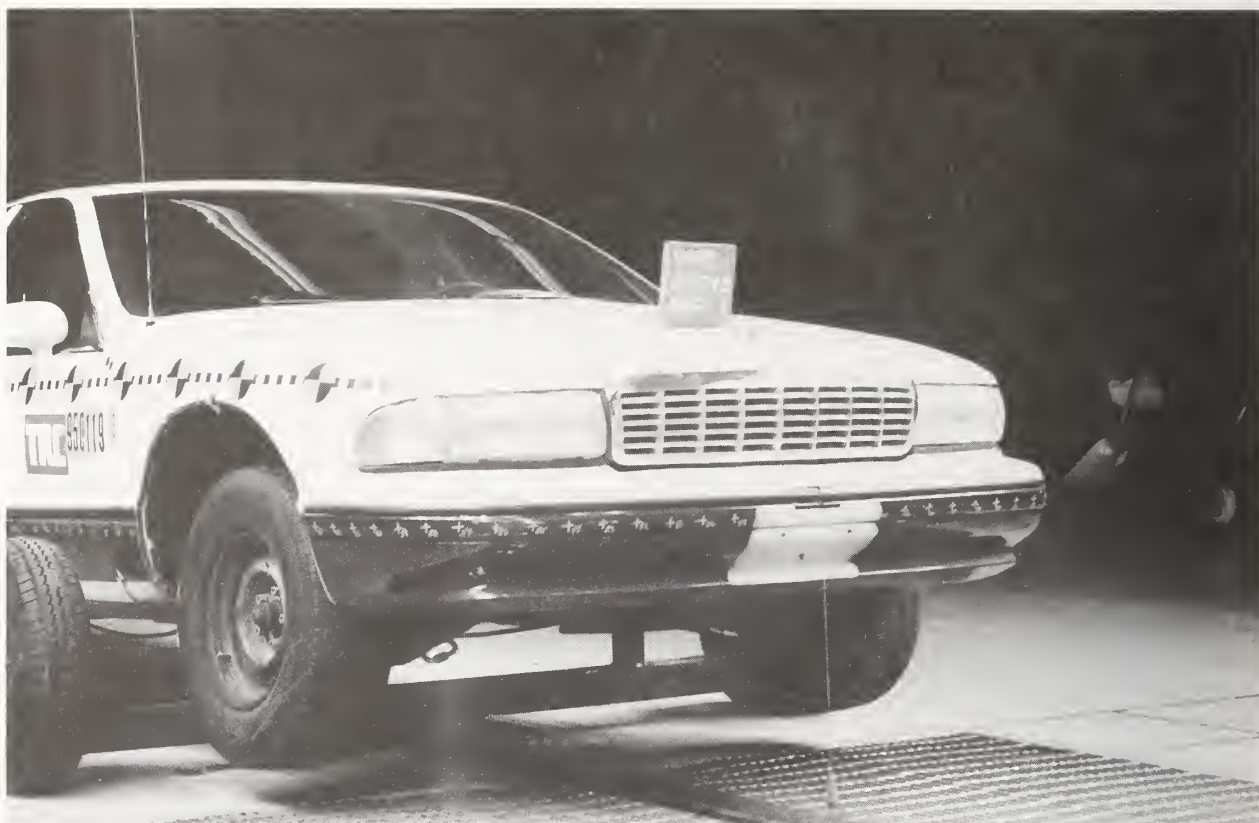


Figure A-7. Pre-Test Right Front Three-Quarter View



Figure A-8. Post-Test Right Front Three-Quarter View



Figure A-9. Pre-Test Right Side View



Figure A-10. Post-Test Right Side View



Figure A-11. Pre-Test Overhead View



Figure A-12. Post-Test Overhead View

List of Photographs

Test No. 950119-2

- A-13. Post-Test Left Side View
- A-14. Post-Test Left Front Three-Quarter View
- A-15. Post-Test Front View
- A-16. Post-Test Right Front Three-Quarter View
- A-17. Post-Test Right Side View
- A-18. Post-Test Overhead View





Figure A-13. Post-Test Left Side View



Figure A-14. Post-Test Left Front Three-Quarter View

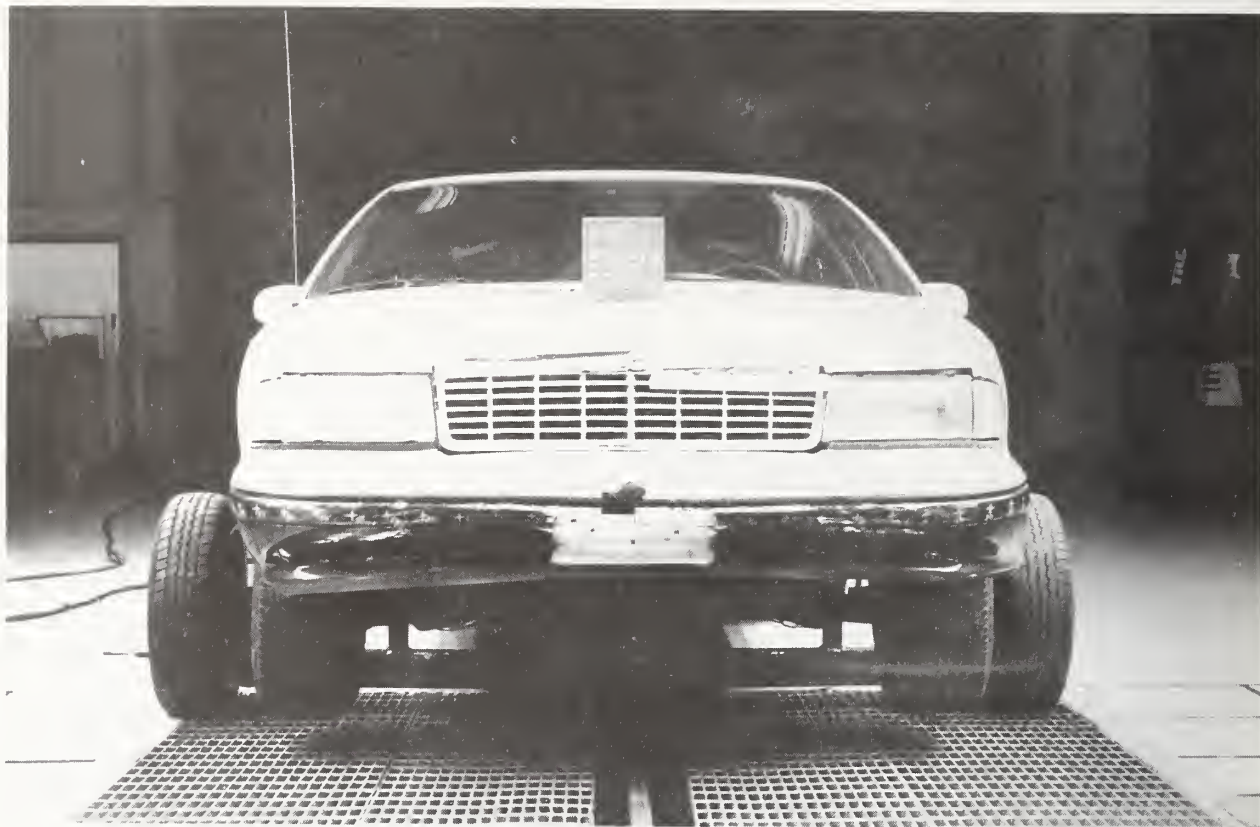


Figure A-15. Post-Test Front View



Figure A-16. Post-Test Right Front Three-Quarter View



Figure A-17. Post-Test Right Side View



Figure A-18. Post-Test Overhead View

List of Photographs

Test No. 950119-3

- A-19. Post-Test Left Side View
- A-20. Post-Test Left Front Three-Quarter View
- A-21. Post-Test Front View
- A-22. Post-Test Right Front Three-Quarter View
- A-23. Post-Test Right Side View
- A-24. Post-Test Overhead View



Figure A-19. Post-Test Left Side View



Figure A-20. Post-Test Left Front Three-Quarter View

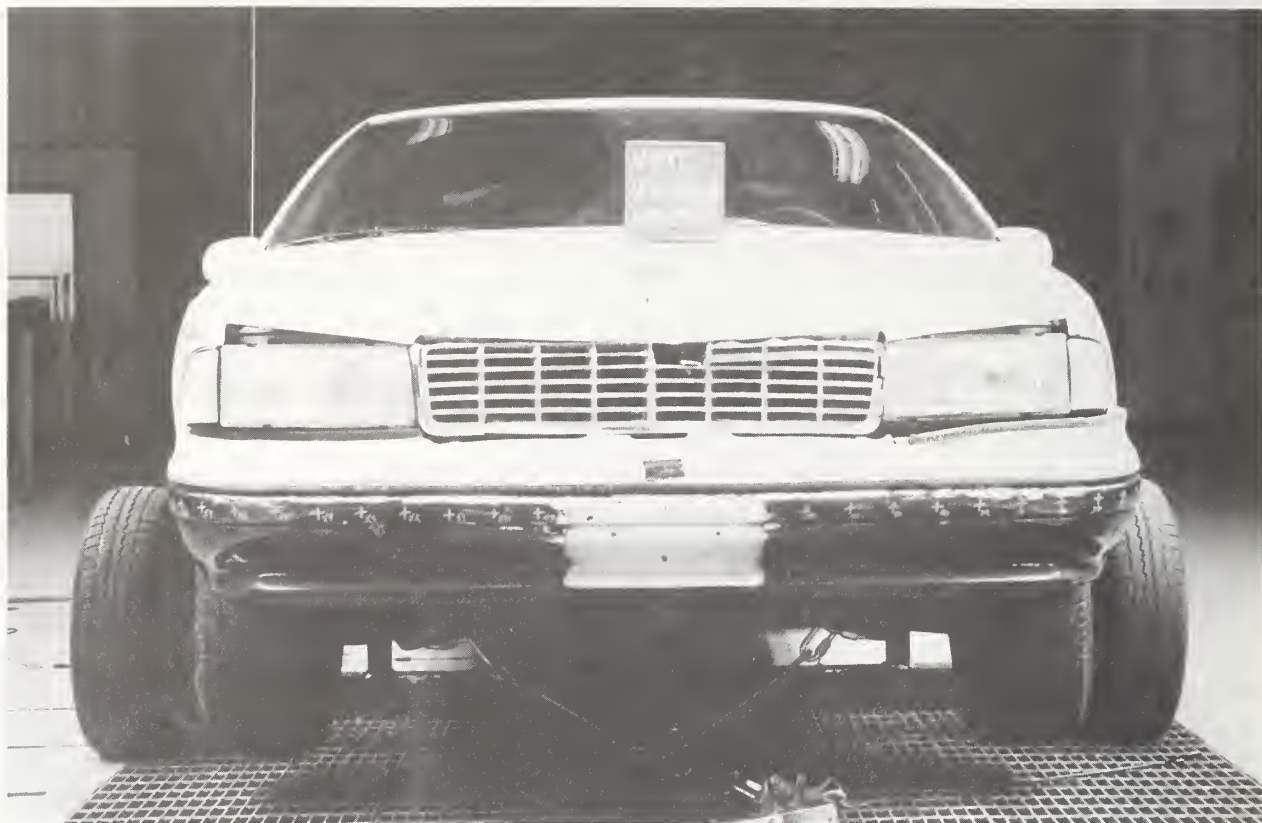


Figure A-21. Post-Test Front View



Figure A-22. Post-Test Right Front Three-Quarter View



Figure A-23. Post-Test Right Side View



Figure A-24. Post-Test Overhead View

List of Photographs

Test No. 950119-4

- A-25. Post-Test Left Side View
- A-26. Post-Test Left Front Three-Quarter View
- A-27. Post-Test Front View
- A-28. Post-Test Right Front Three-Quarter View
- A-29. Post-Test Right Side View
- A-30. Post-Test Overhead View



Figure A-25. Post-Test Left Side View



Figure A-26. Post-Test Left Front Three-Quarter View

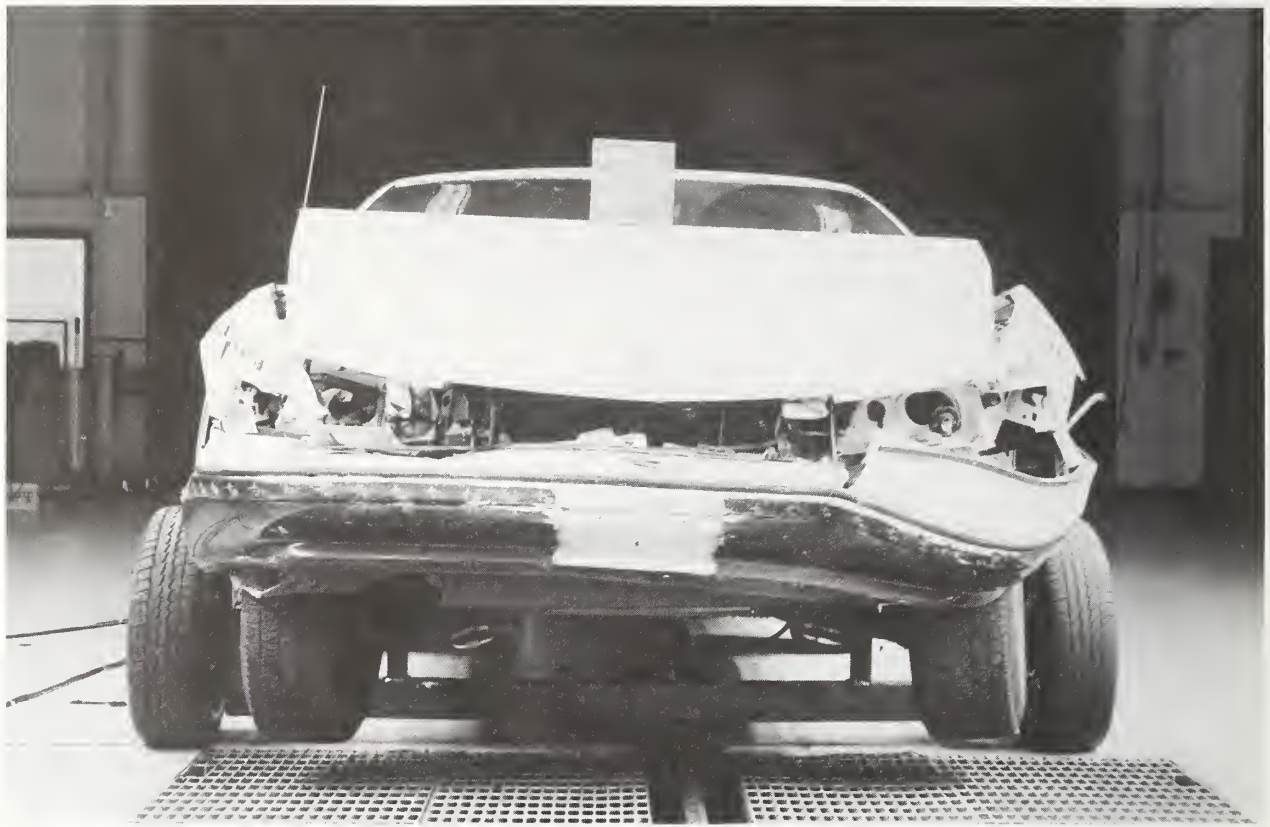


Figure A-27. Post-Test Front View



Figure A-28. Post-Test Right Front Three-Quarter View



Figure A-29. Post-Test Right Side View



Figure A-30. Post-Test Overhead View



List of Photographs

Test No. 950119-5

- A-31. Post-Test Left Side View
- A-32. Post-Test Left Front Three-Quarter View
- A-33. Post-Test Front View
- A-34. Post-Test Right Front Three-Quarter View
- A-35. Post-Test Right Side View
- A-36 Post-Test Overhead View

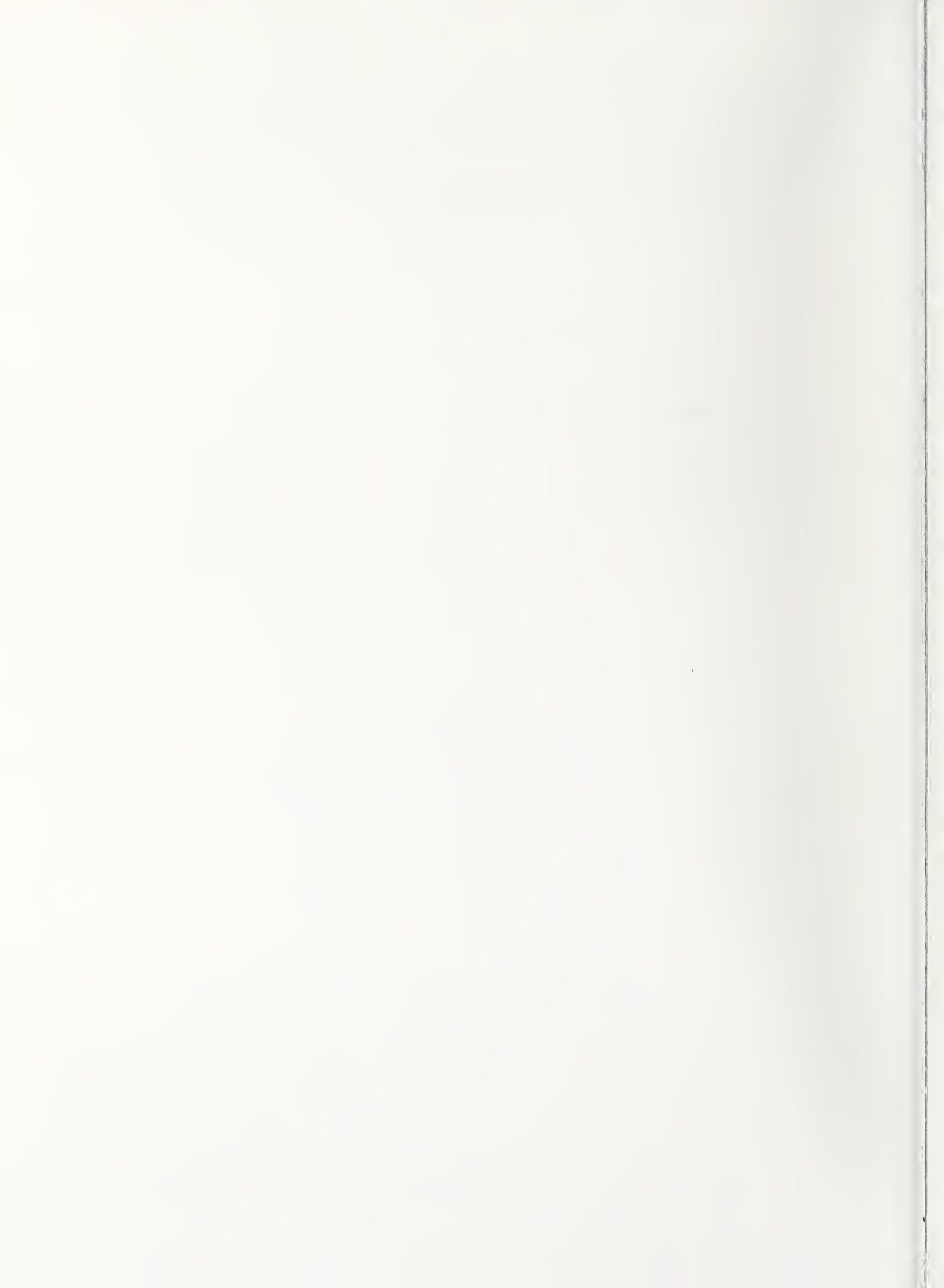




Figure A-31. Post-Test Left Side View

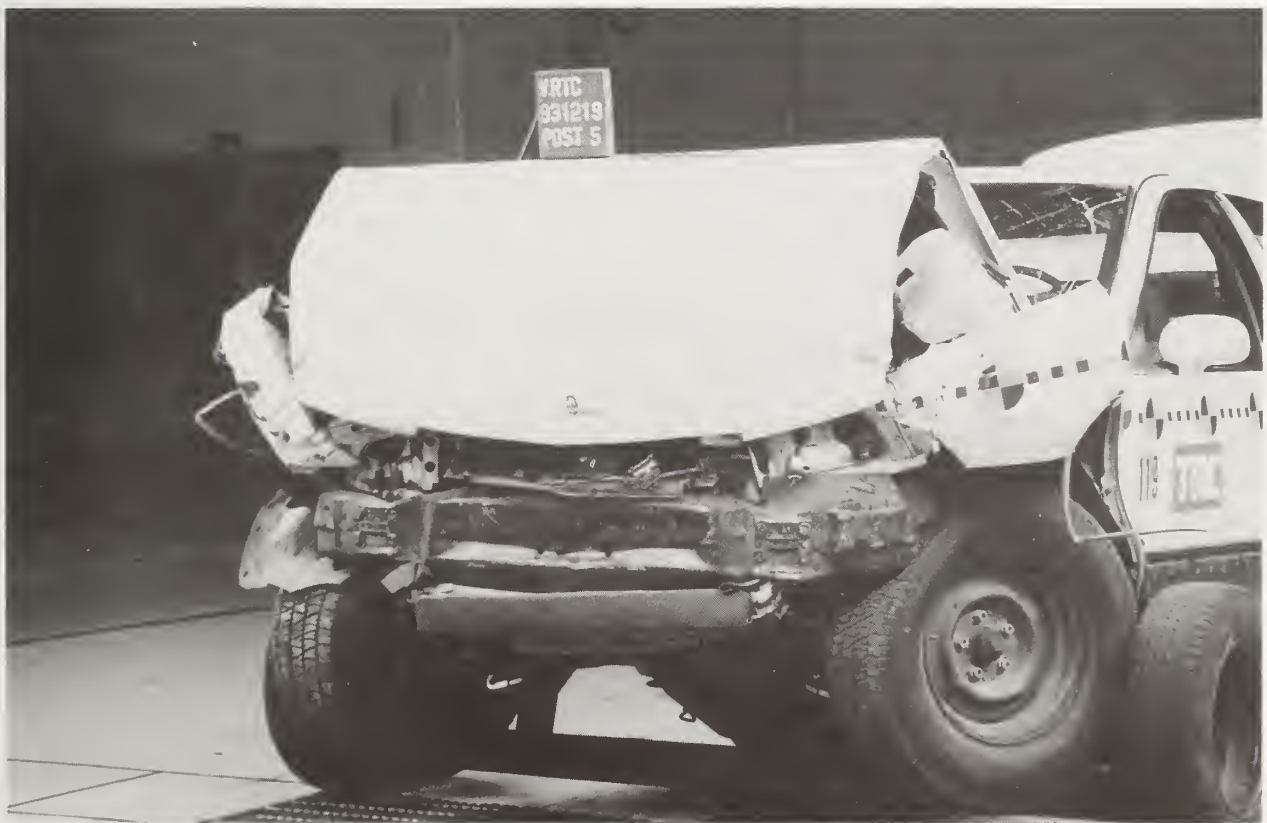


Figure A-32. Post-Test Left Front Three-Quarter View

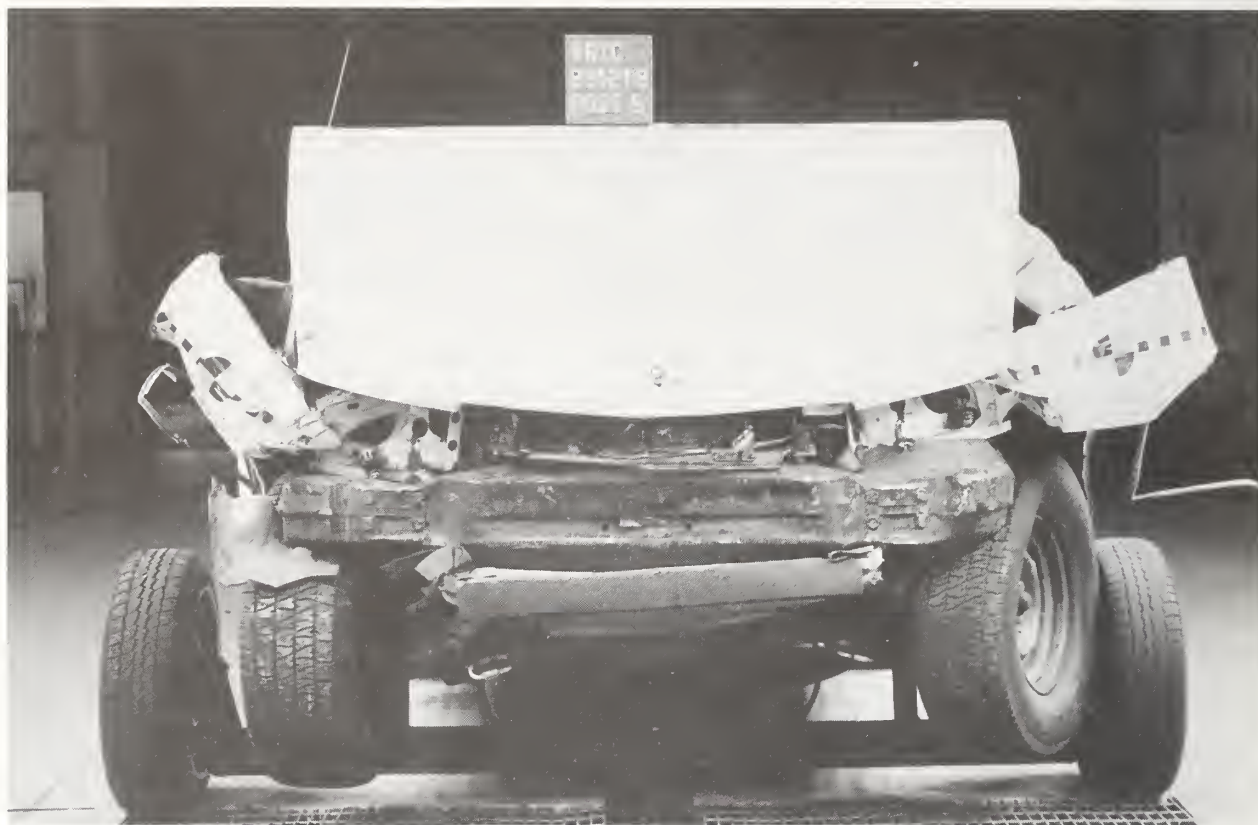


Figure A-33. Post-Test Front View

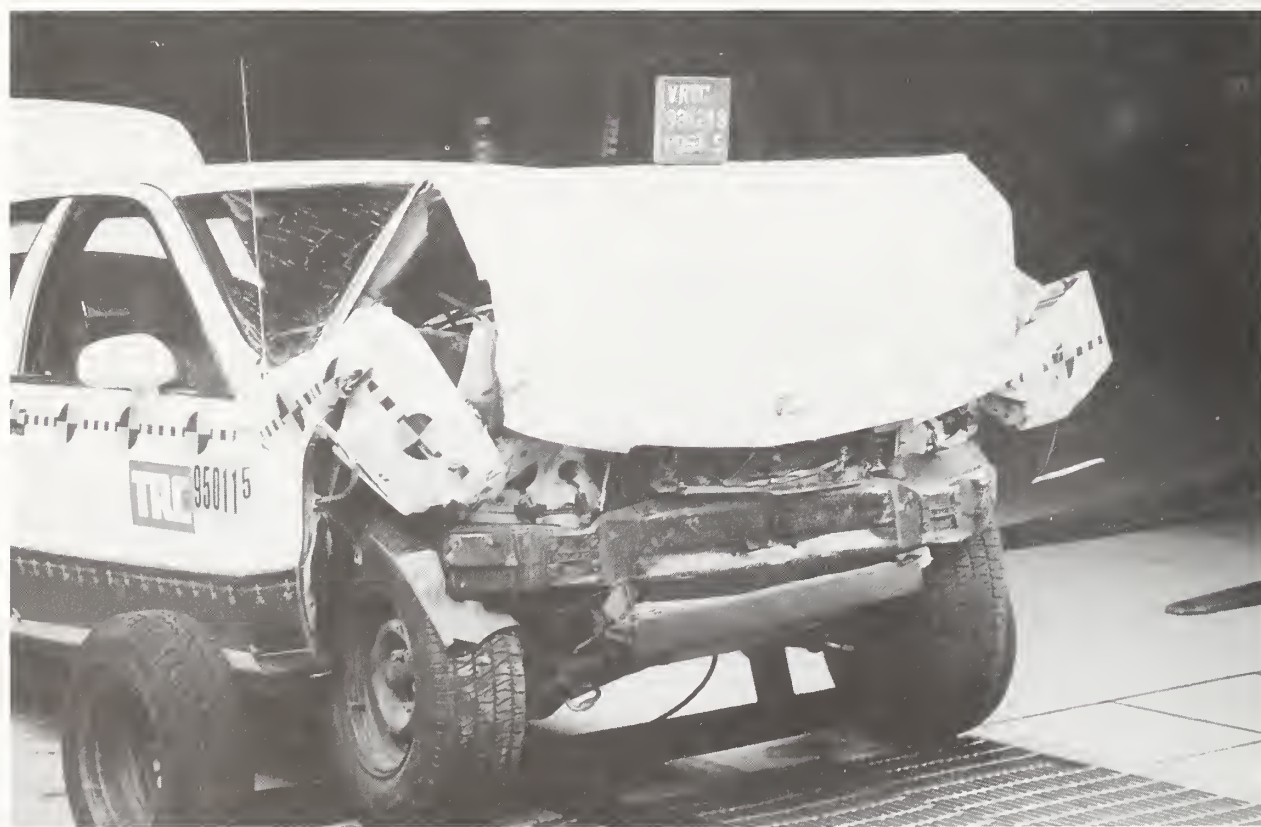


Figure A-34. Post-Test Right Front Three-Quarter View

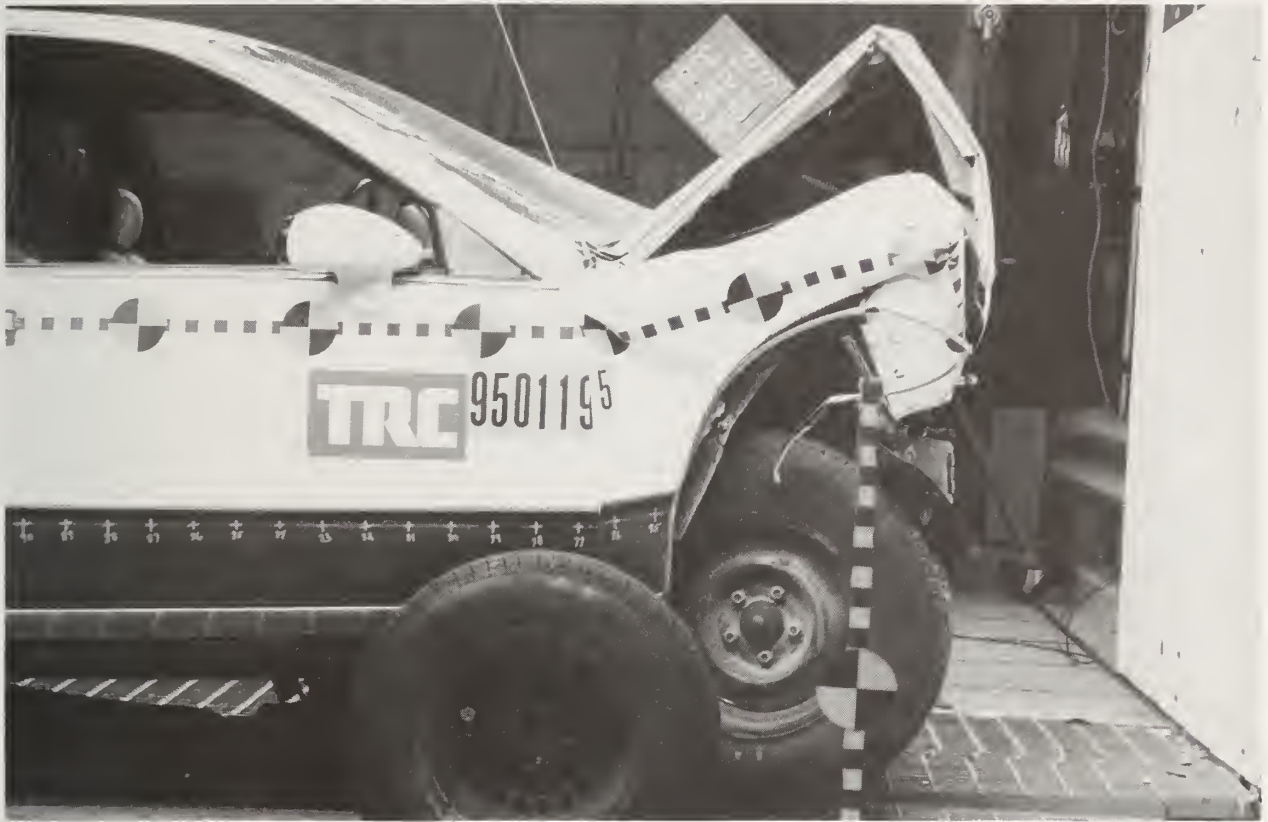


Figure A-35. Post-Test Right Side View



Figure A-36. Post-Test Overhead View



Appendix B

Data Plots

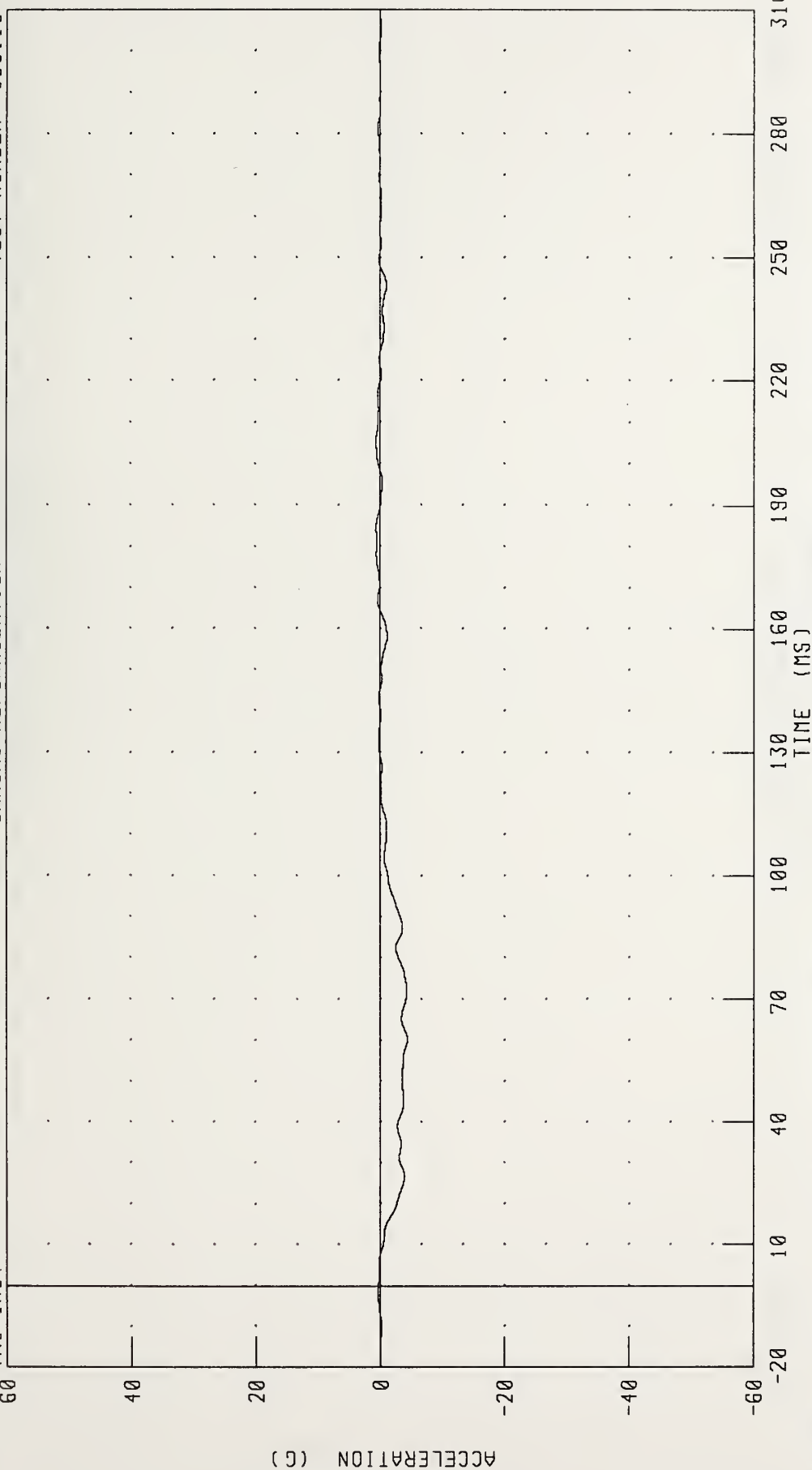
Data Plots

Test No. 950119-1

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
 VEHICLE CG X-AXIS ACCELERATION

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



CHANNEL VCGXG1 FILTER CH CLASS 60

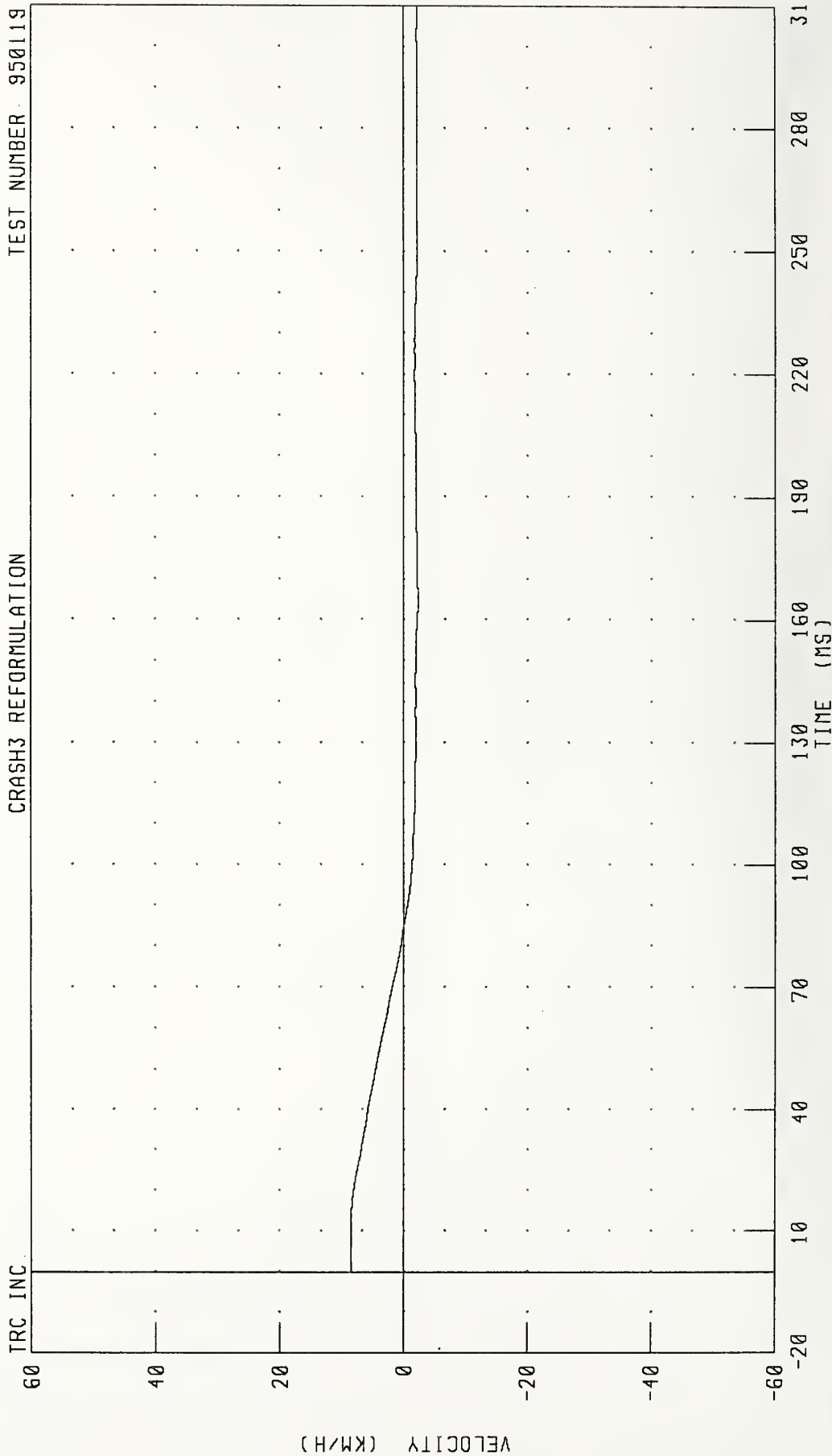
PEAK DATA 0 71 G @ 205.36 MS, -4.36 G @ 60 16 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

VEHICLE CG X-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER 950119



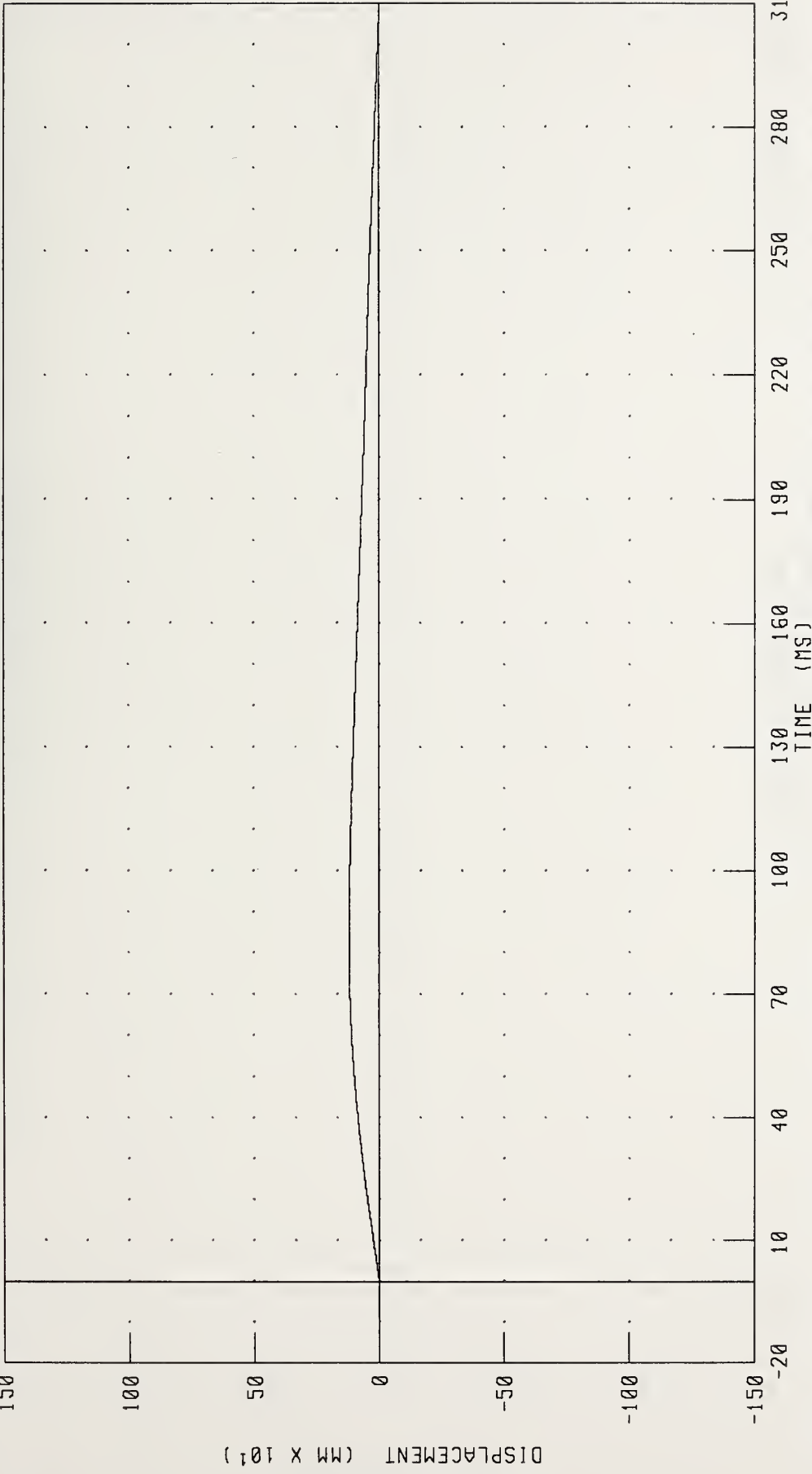
CHANNEL: VCGXV1 FILTER: CH CLASS 180

PEAK DATA 8.56 KM/H @ 8.32 MS; -2.32 KM/H @ 164.80 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
VEHICLE CG X-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.

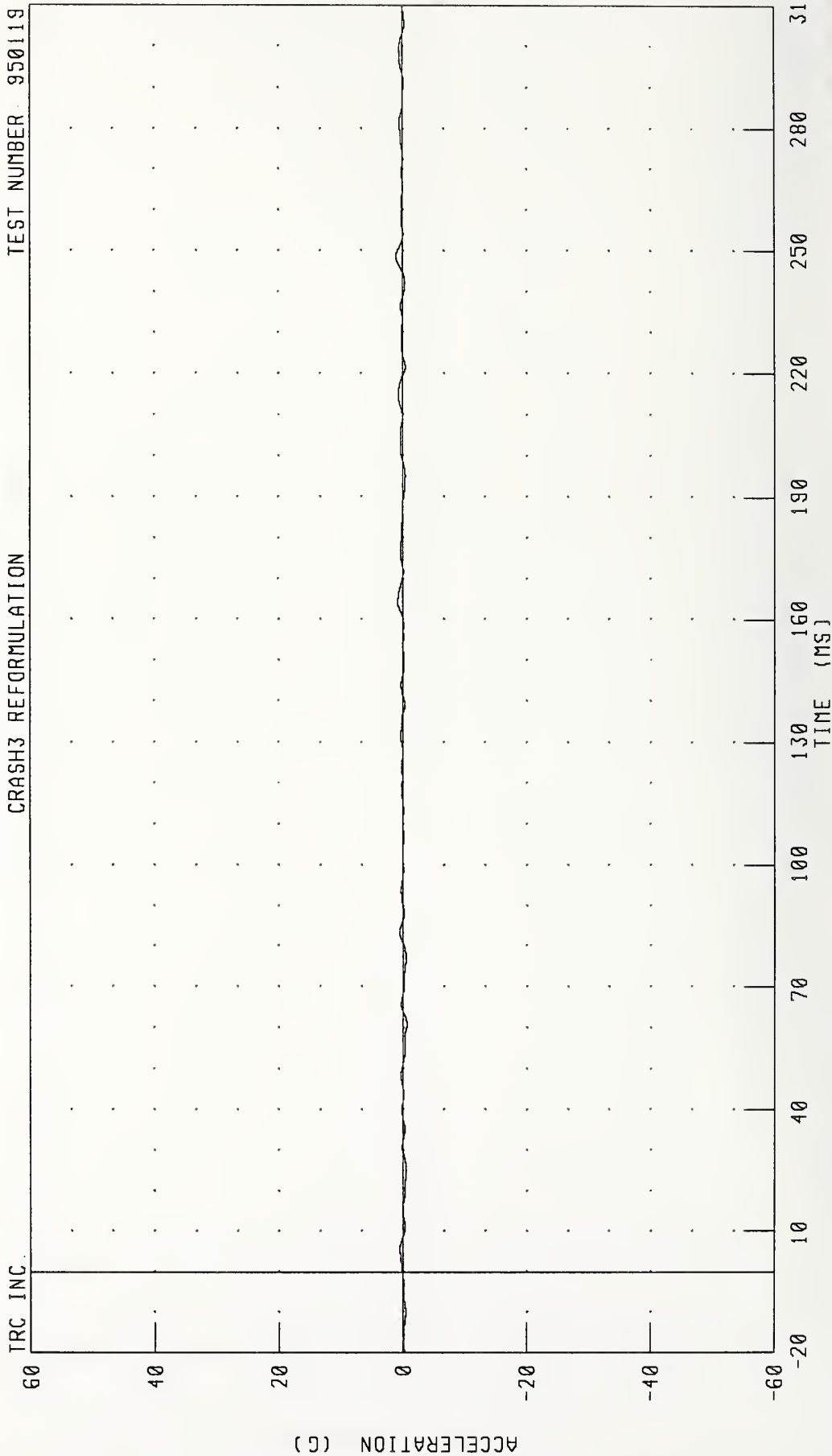


CHANNEL: VCGXD1 FILTER: CH CLASS 180 PEAK DATA: 120 69 MM @ 84 88 MS, -0 41 MM @ 310 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

VEHICLE CG Y-AXIS ACCELERATION

CRASH3 REFORMULATION TEST NUMBER 950119



CHANNEL: VCGY01 FILTER: CH CLASS 60

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
VEHICLE CC Y-AXIS VELOCITY

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC.



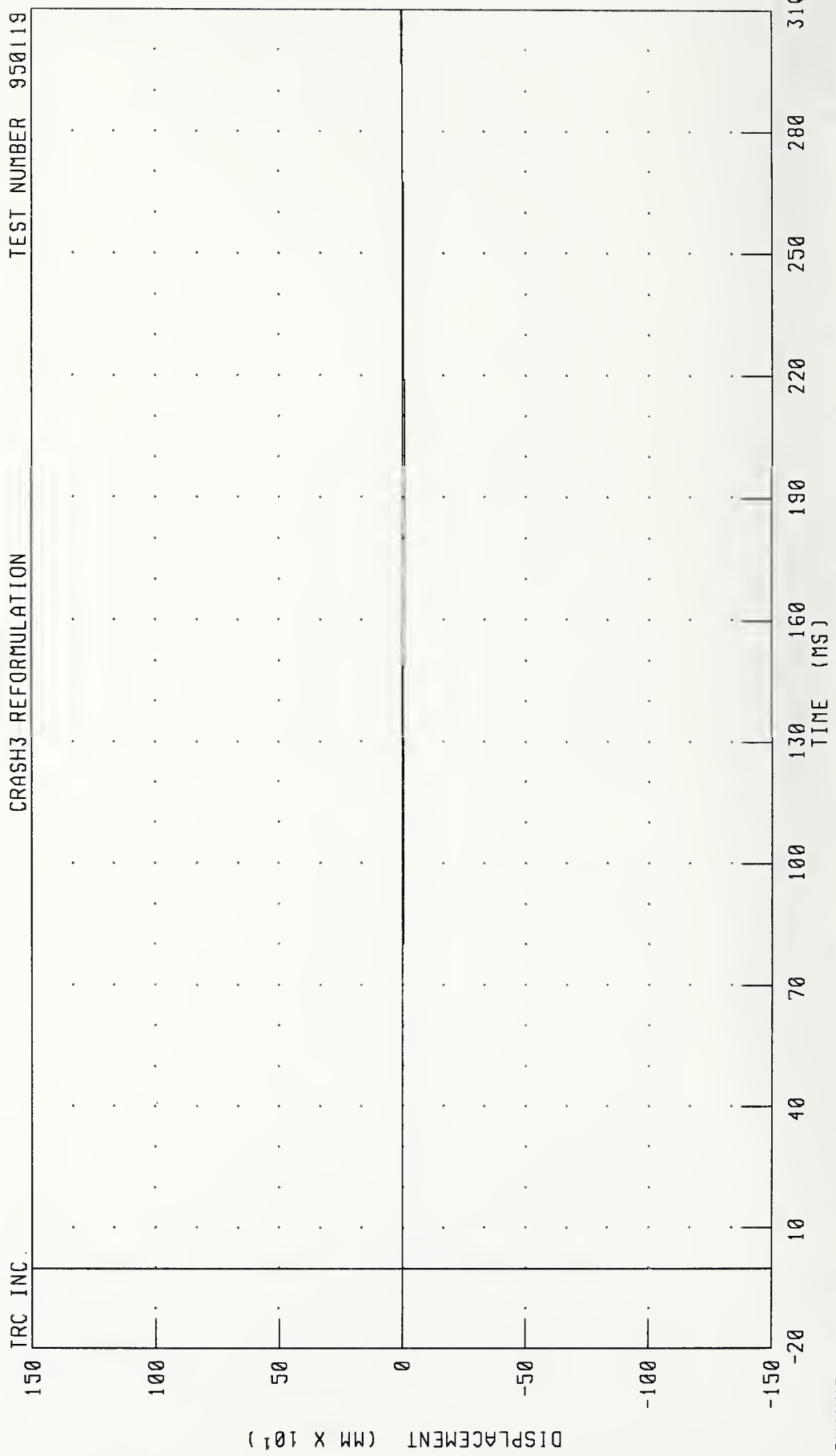
CHANNEL: VCGYV1 FILTER: CH CLASS 180

PEAK DATA: 0.73 KM/H @ 302.72 MS, -0.33 KM/H @ 80.96 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
 VEHICLE CG Y-AXIS DISPLACEMENT

TEST NUMBER 950119

CRASH3 REFORMULATION



CHANNEL: VCGY01 FILTER: CH CLASS 180

PEAK DATA 4.98 MM @ 310.00 MS, -6.98 MM @ 176.16 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5 VEHICLE CG Z-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC.

60

40

20

0

-20

-40

-60

ACCELERATION (G)

10

40

70

100

130

160

190

220

250

280

310

TIME (MS)

TEST NUMBER

950119

CHANNEL

VCGZG1

FILTER

CH

CLASS

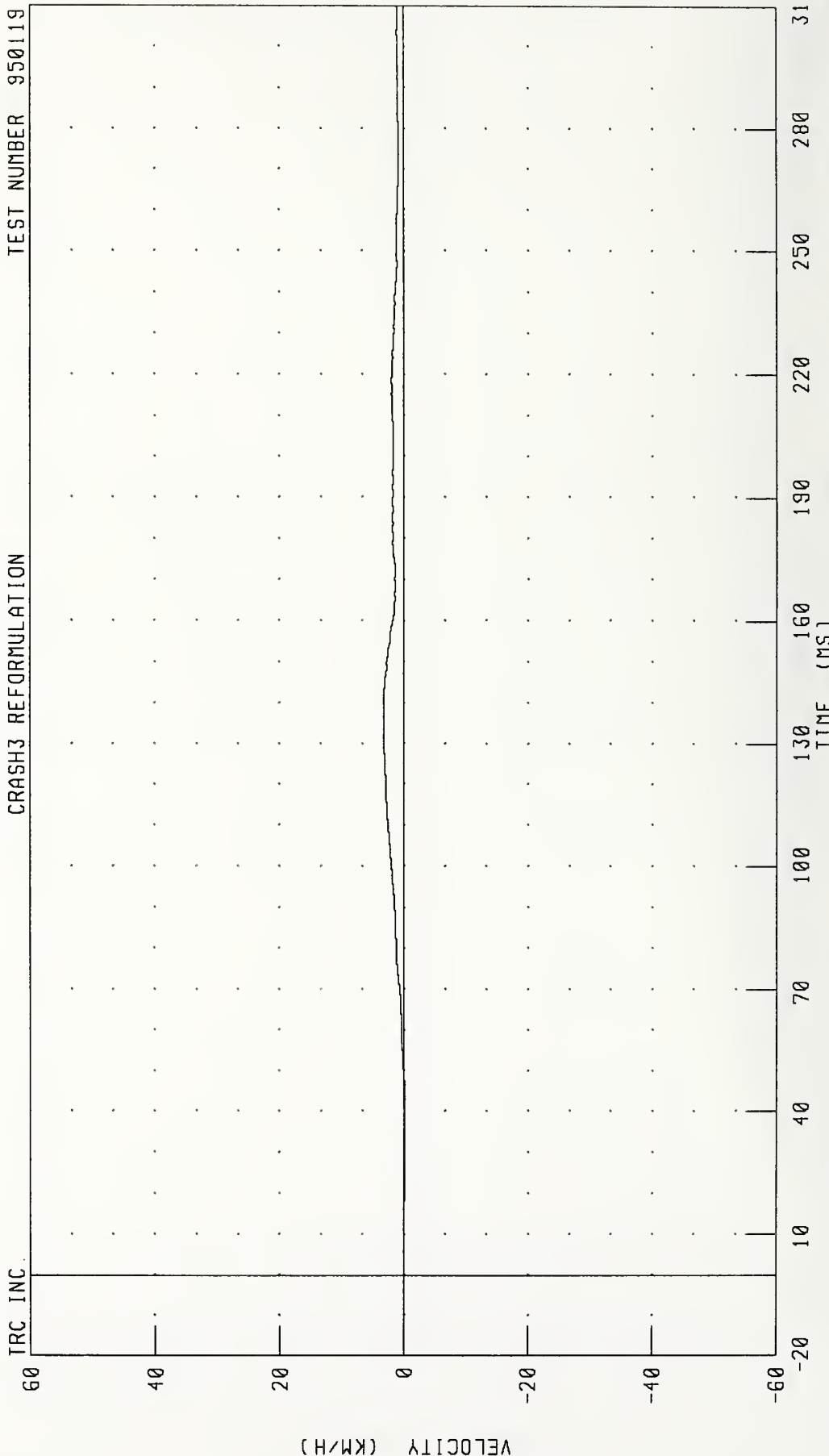
60

PEAK DATA: 2.27 G @ 72.48 MS, -3.36 G @ 159.04 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

VEHICLE CG Z-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119



CHANNEL: VCGZV1 FILTER CH. CLASS 180

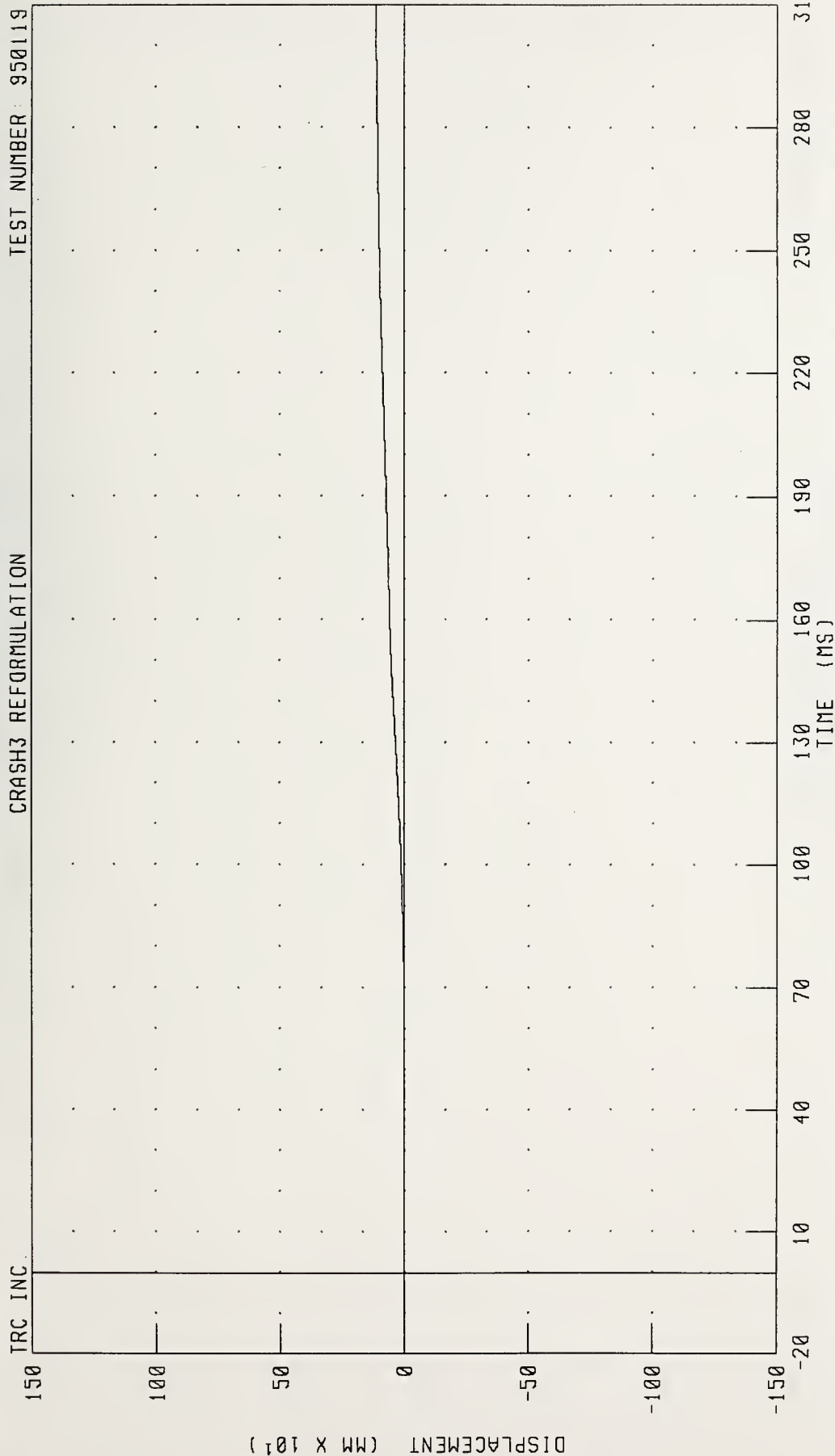
PEAK DATA: 3 29 KM/H @ 136.72 MS, -0.19 KM/H @ 43.44 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
 VEHICLE CG Z-AXIS DISPLACEMENT

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC.

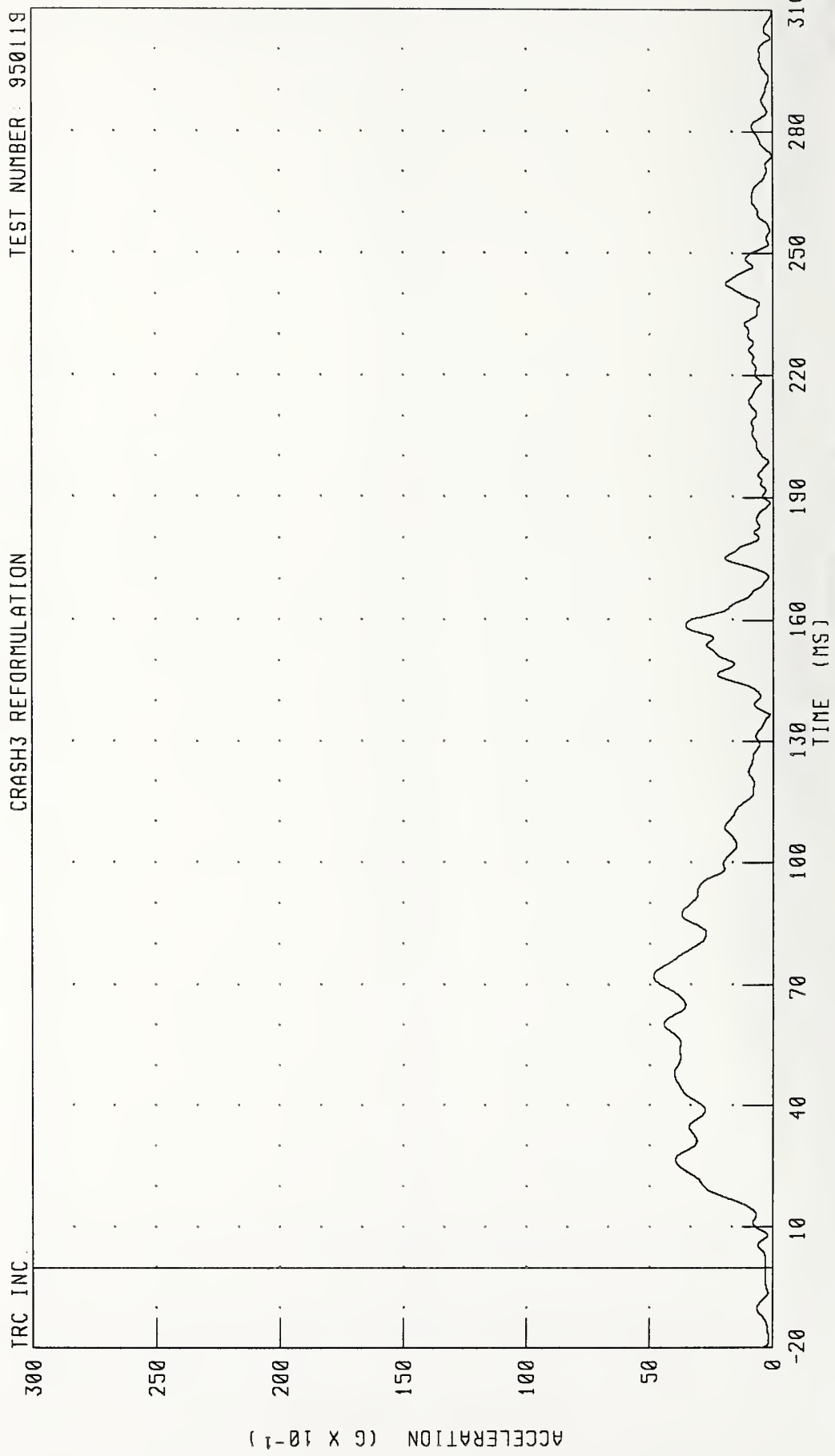


CHANNEL: VCGZ01 FILTER: CH CLASS 180

PEAK DATA

116 67 MM @ 310 00 MS, -1 24 MM @ 48 56 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
VEHICLE CG RESULTANT ACCELERATION



CHANNEL: VCGRG1 FILTER: CH. CLASS 60

PEAK DATA: 4.86 G @ 72.16 MS, 0.04 G @ 274.08 MS

TEST NUMBER: 950118

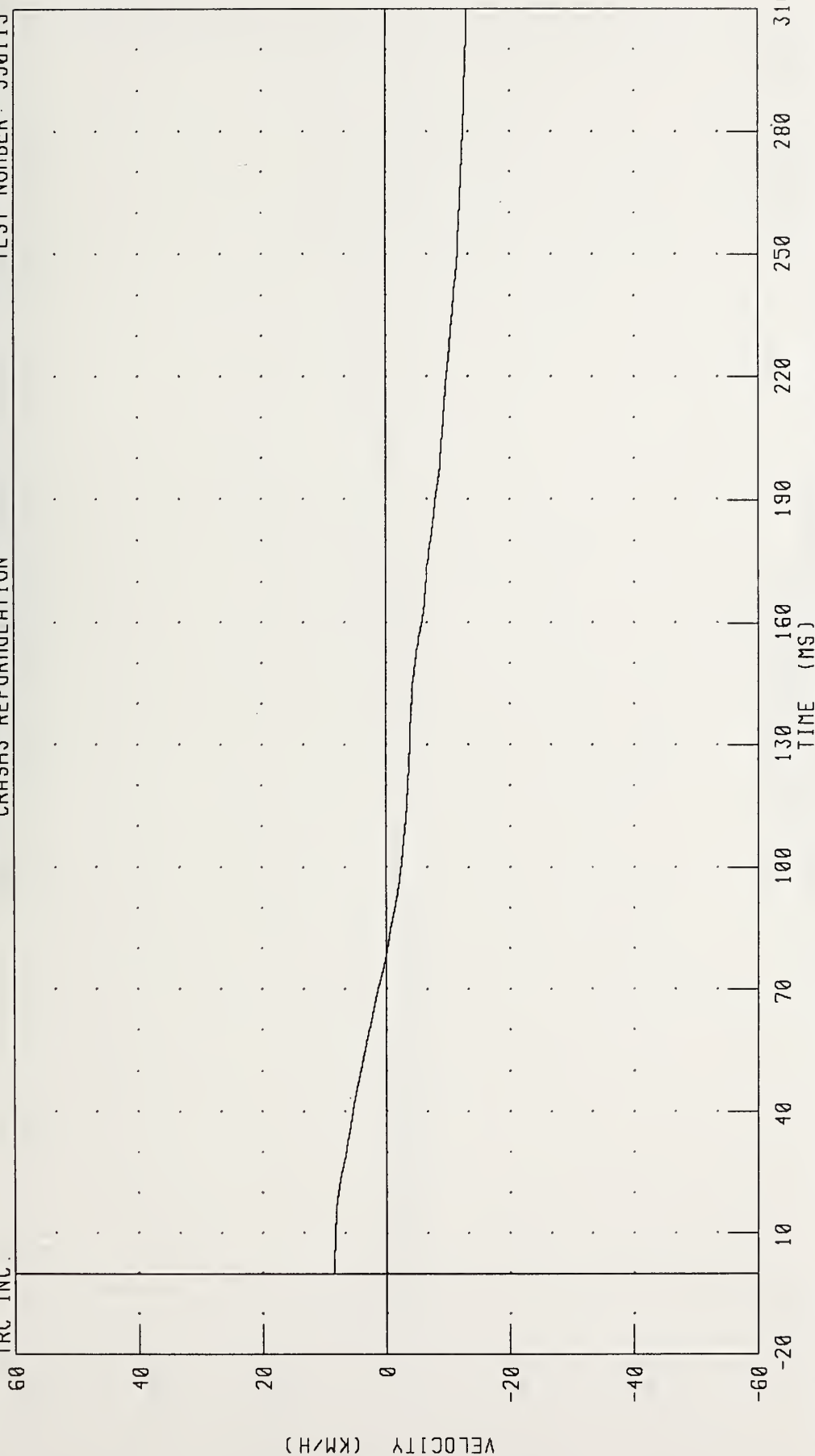
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

VEHICLE CG RESULTANT VELOCITY

CRASH3 REFORMULATION

TEST NUMBER: 950119

TRC INC.



CHANNEL: VCGRV1 FILTER: CH CLASS 180

PEAK DATA: 8 50 KM/H @ 0 00 MS;

-13 08 KM/H @ 310 00 MS

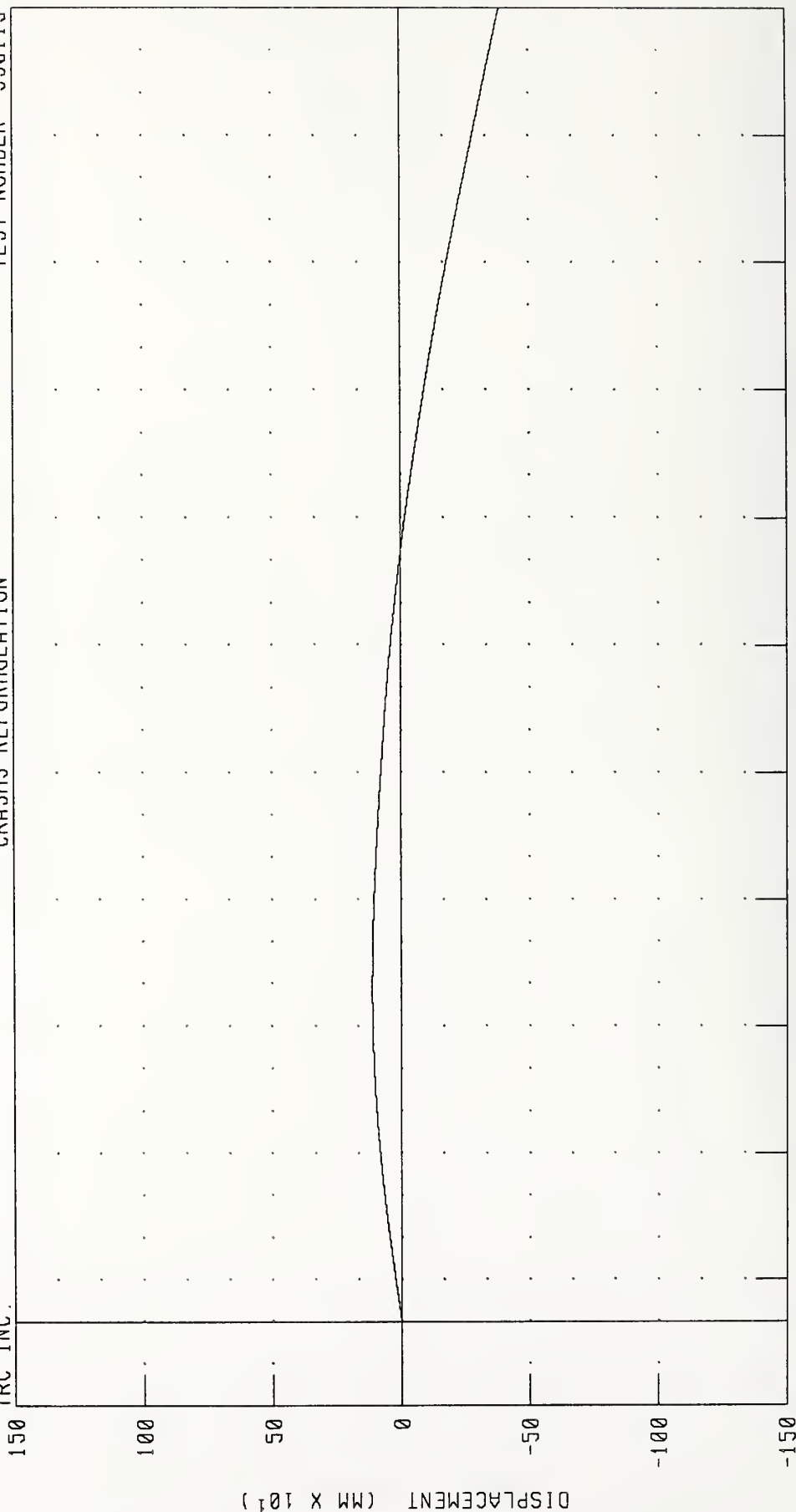
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

VEHICLE CG RESULTANT DISPLACEMENT

CRASH3 REFORMULATION

TRC INC.

TEST NUMBER 950119



PEAK DATA: 112.71 MM @ 78.48 MS, -388.68 MM @ 310.00 MS

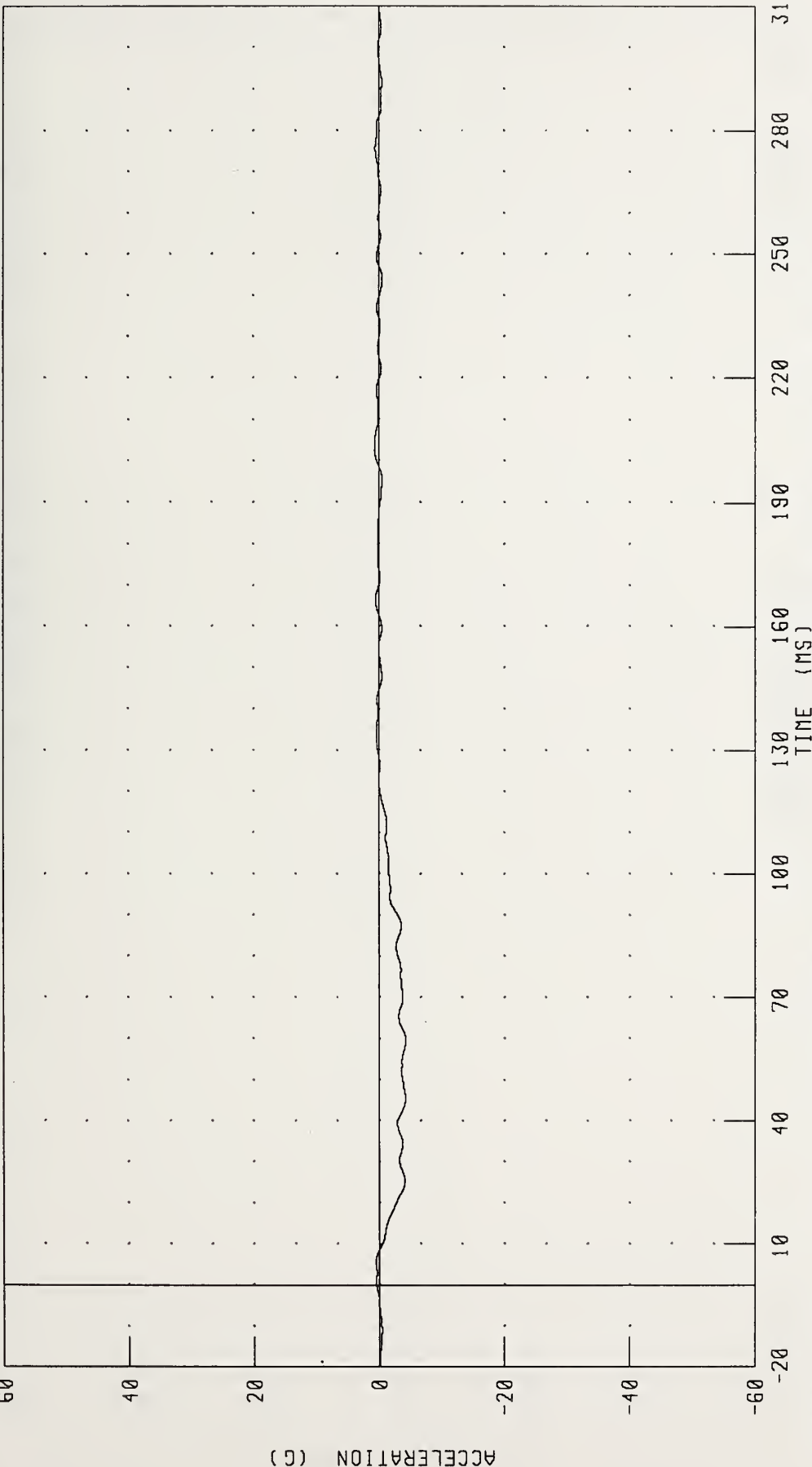
CHANNEL: VCGRD1 FILTER: CH CLASS 180

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
LEFT FRONT SILL X-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119

IRC INC.



CHANNEL: LFSXG1 FILTER: CH CLASS 60

TIME (MS)

PEAK DATA 0 66 G @ 204.96 MS, -4 30 G @ 59.68 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
LEFT FRONT SILL X-AXIS VELOCITY

CRASH3 REFORMULATION

TRC INC.

60

40

20

0

-20

-40

-60

VELOCITY (KM/H)

10

40

70

100

130

160

190

220

250

280

310

TIME (MS)

PEAK DATA: 8.64 KM/H @ 8.88 MS, -2.09 KM/H @ 129.60 MS

CHANNEL LFSXV1 FILTER: CH CLASS 180

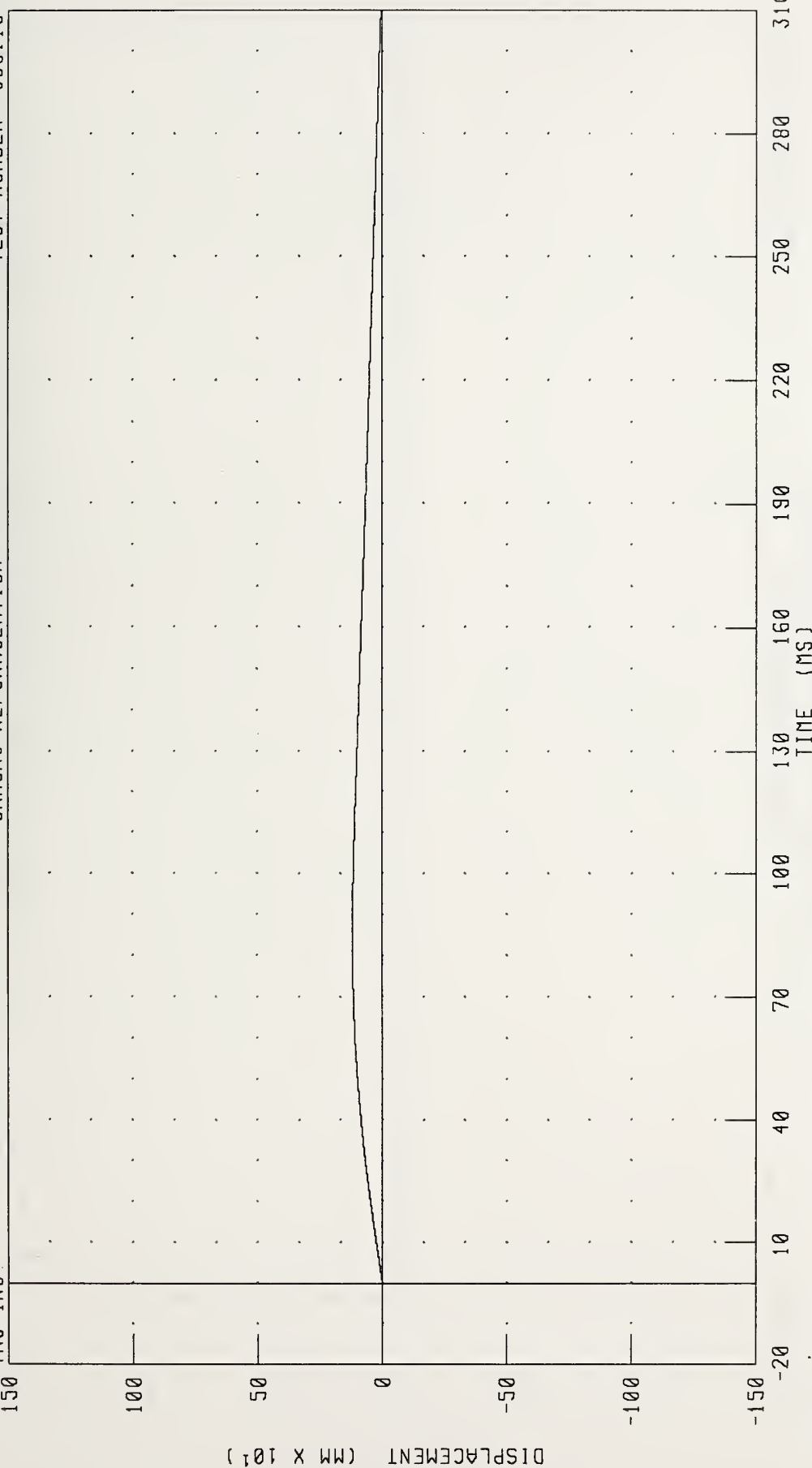
TEST NUMBER 950119

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
LEFT FRONT SILL X-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TRC INC.

TEST NUMBER 950119

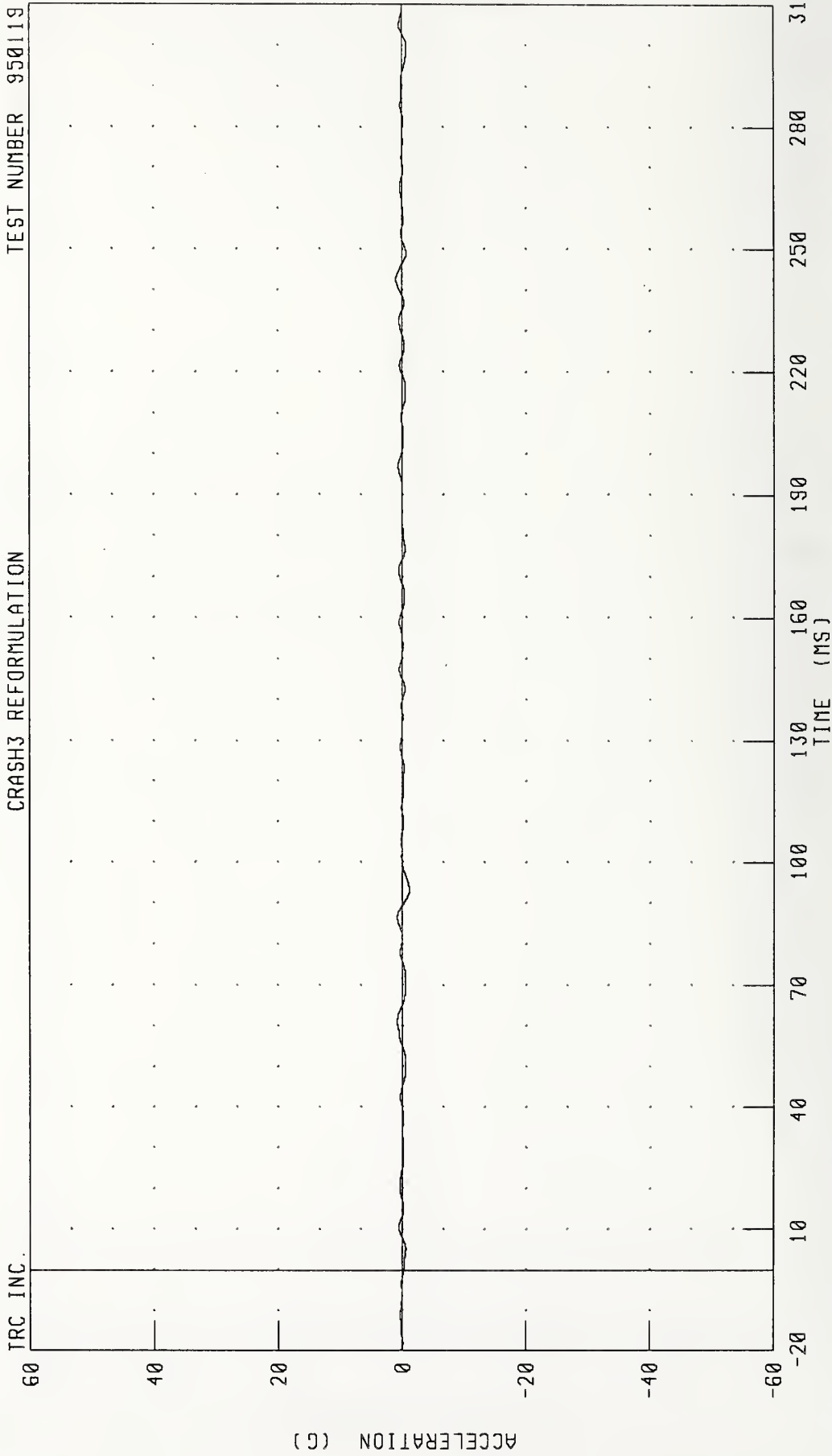


CHANNEL LFSXD1 FILTER: CH. CLASS 180

TIME (MS)

PEAK DATA 119 09 MM @ 84.88 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
LEFT FRONT SILL Y-AXIS ACCELERATION



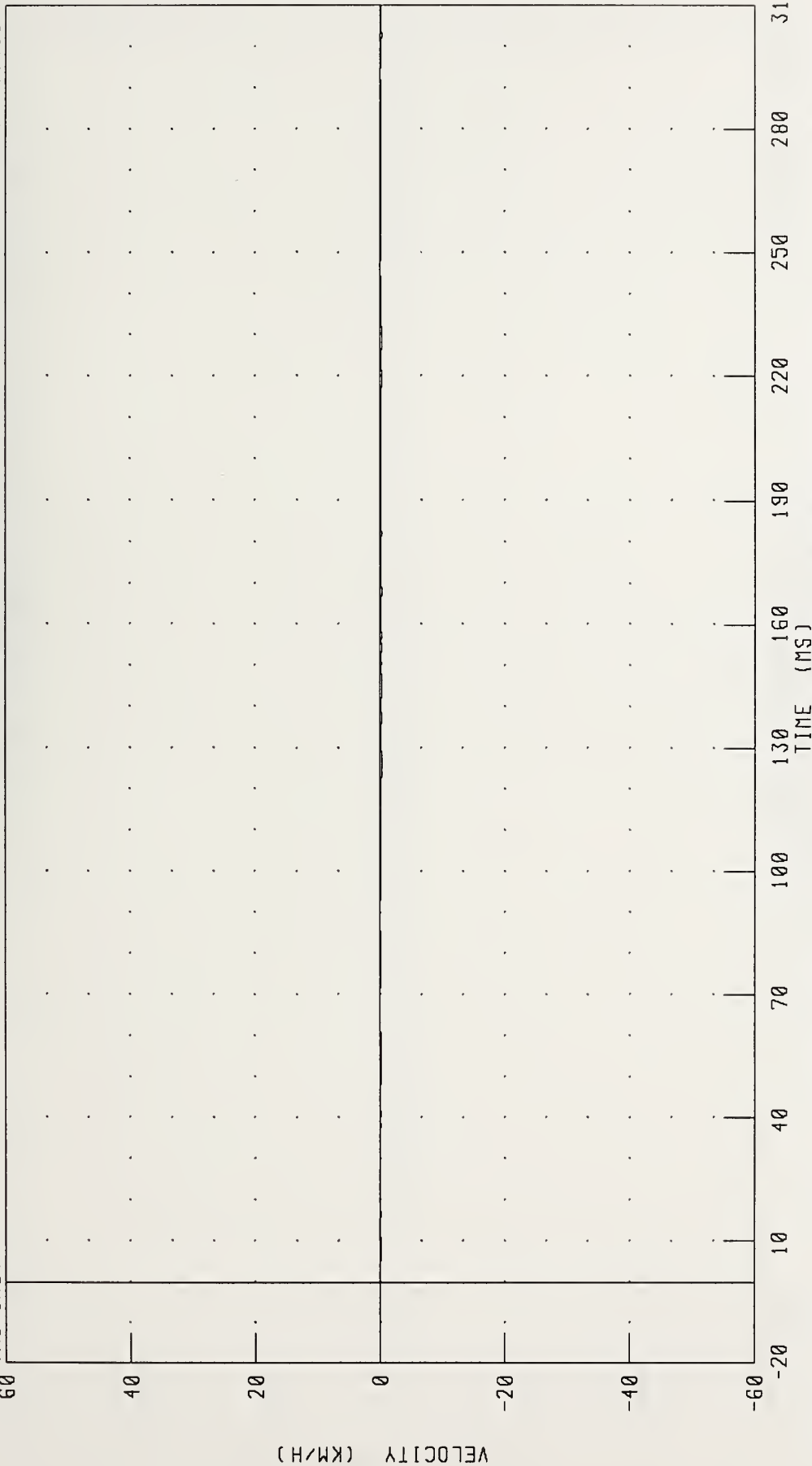
CHANNEL: LFSYG1 FILTER: CH. CLASS 60

PEAK DATA 1.01 G @ 242.56 MS, -1.16 G @ 93.36 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
LEFT FRONT SILL Y-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



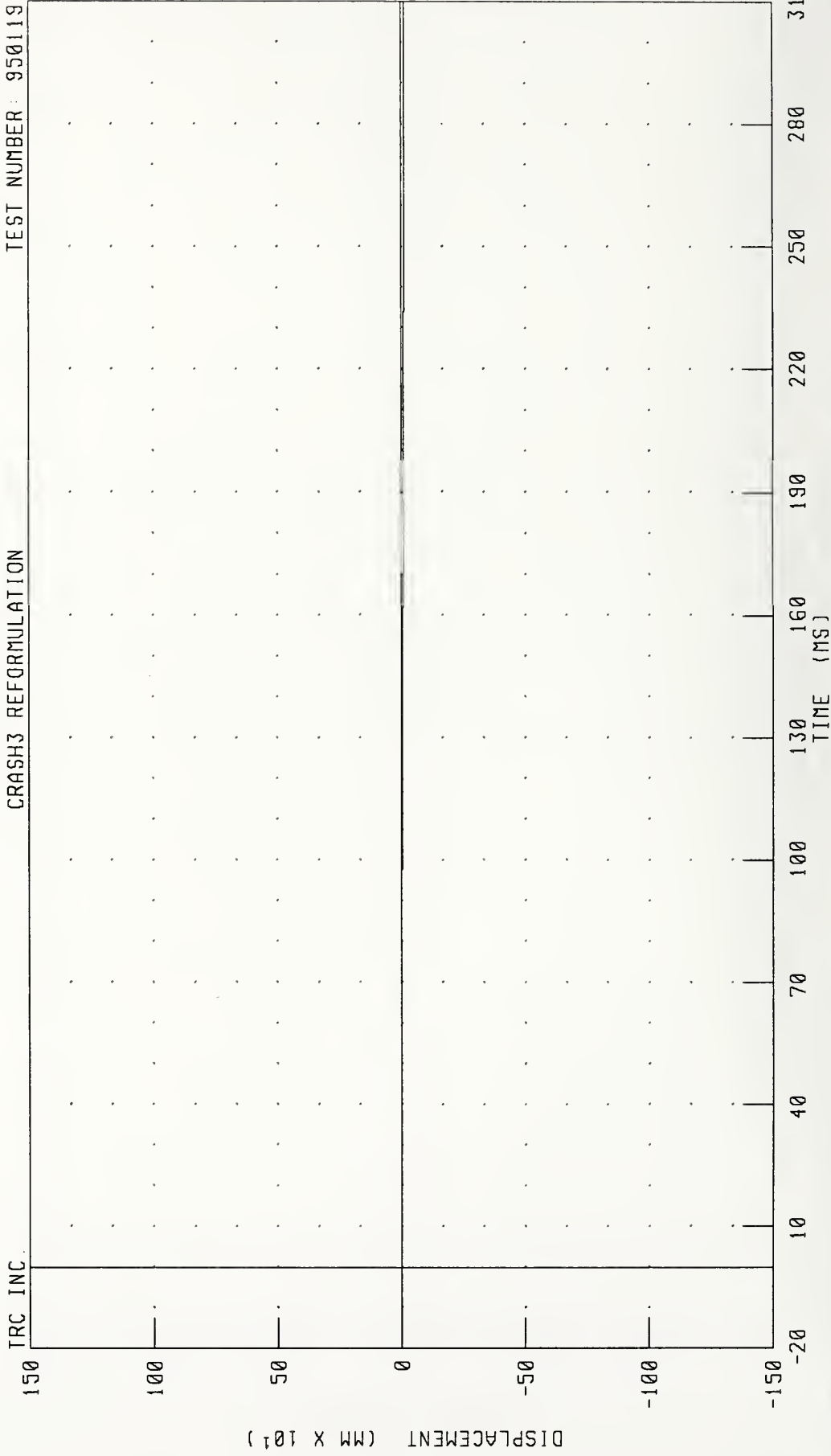
CHANNEL: LFSYV1 FILTER: CH CLASS 180

PEAK DATA: 0 03 KM/H @ 89 04 MS, -0 31 KM/H @ 145 60 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
LEFT FRONT SILL Y-AXIS DISPLACEMENT

TEST NUMBER: 950119

CRASH3 REFORMULATION



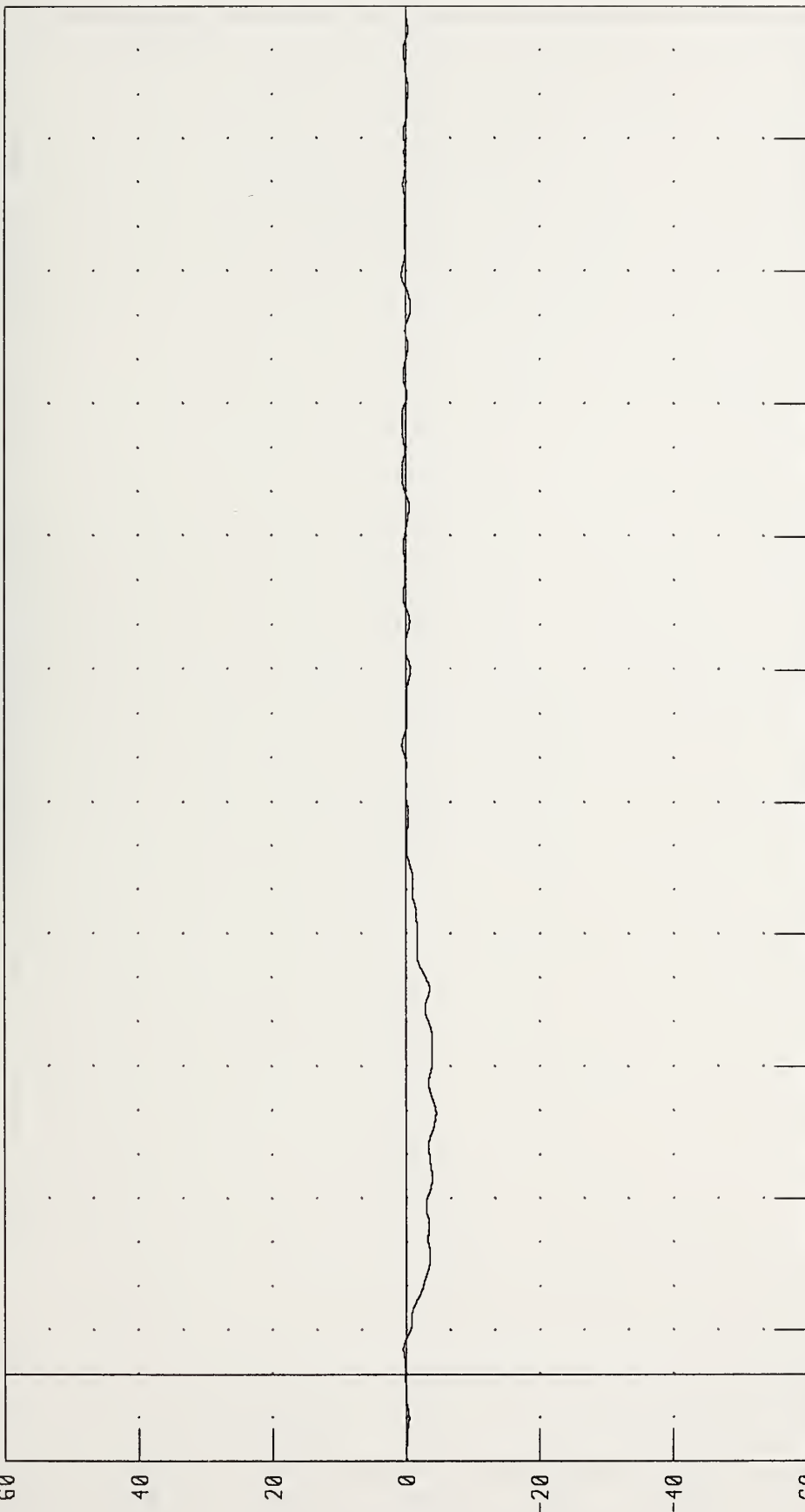
CHANNEL: LFSYD1 FILTER: CH. CLASS 180

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
RIGHT FRONT SILL X-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC



CHANNEL RFSXG1 FILTER CH CLASS 60

TIME (MS)

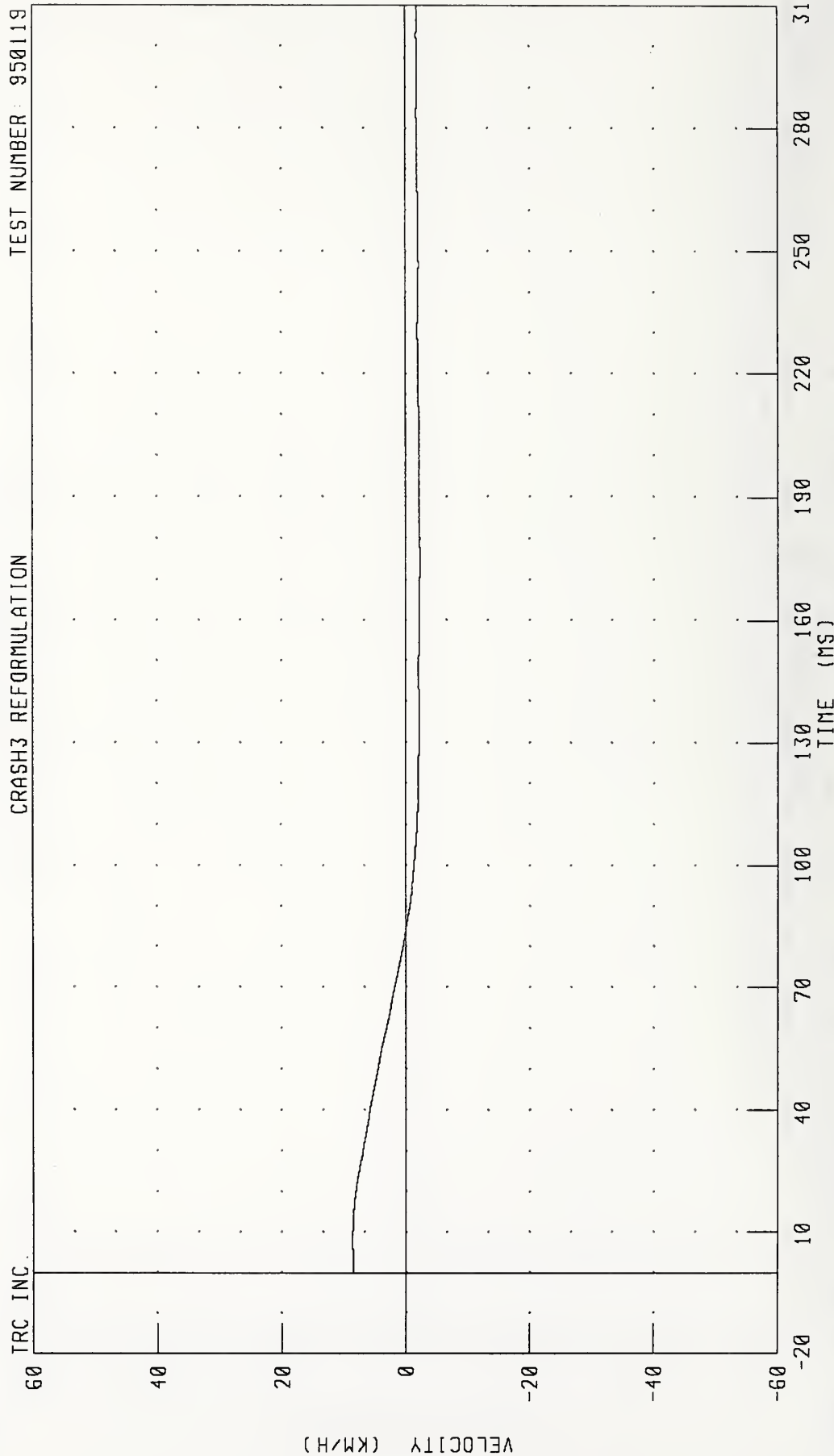
PEAK DATA: 0.64 G @ 249.12 MS, -4.48 G @ 59.36 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

RIGHT FRONT SILL X-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER: 950119



CHANNEL: RFSXV1 FILTER: CH CLASS 180

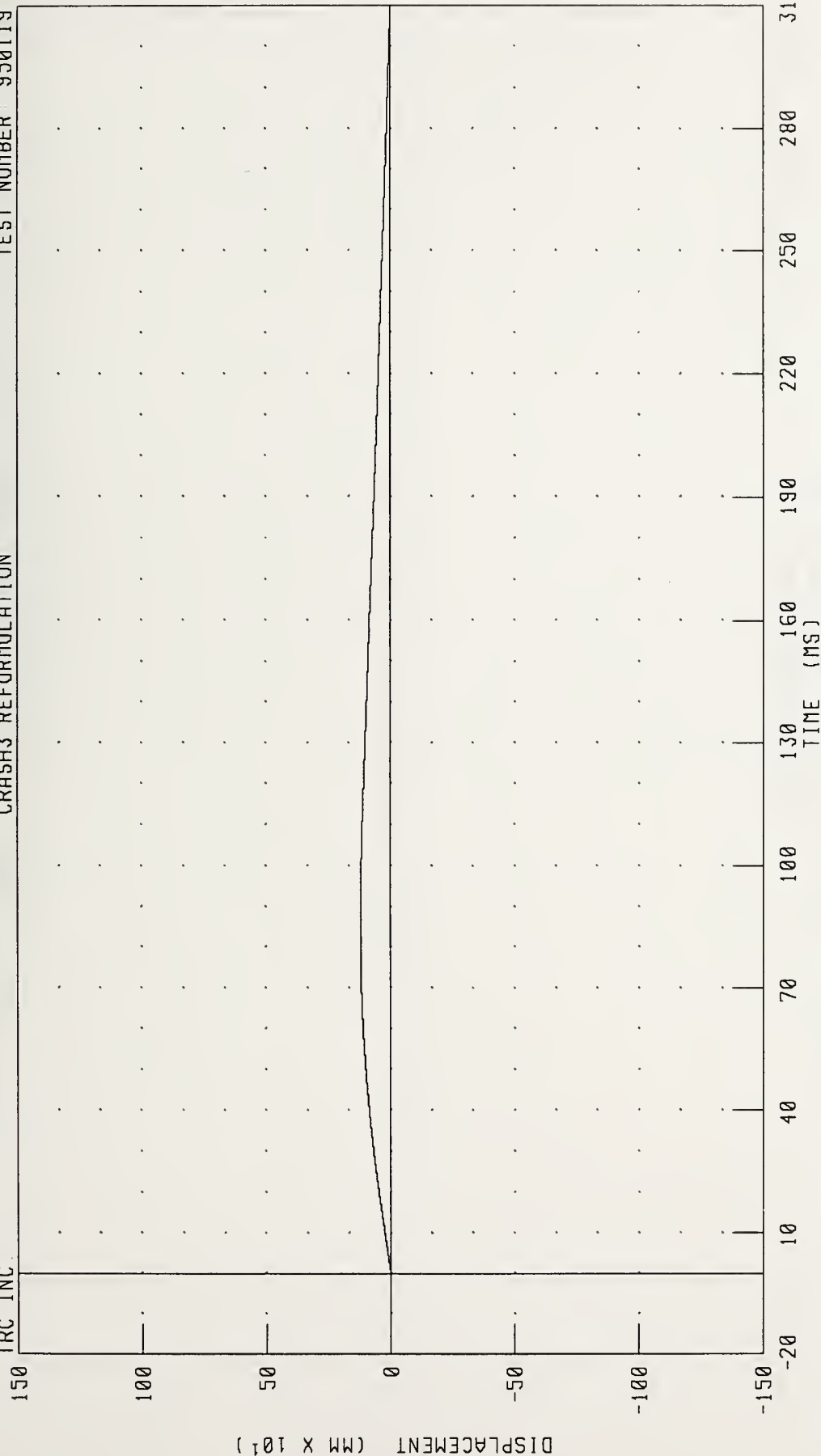
PEAK DATA: 8.59 KM/H @ 8.48 MS, -2.34 KM/H @ 173.52 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
RIGHT FRONT SILL X-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.



CHANNEL: RFSXD1 FILTER: CH. CLASS 180

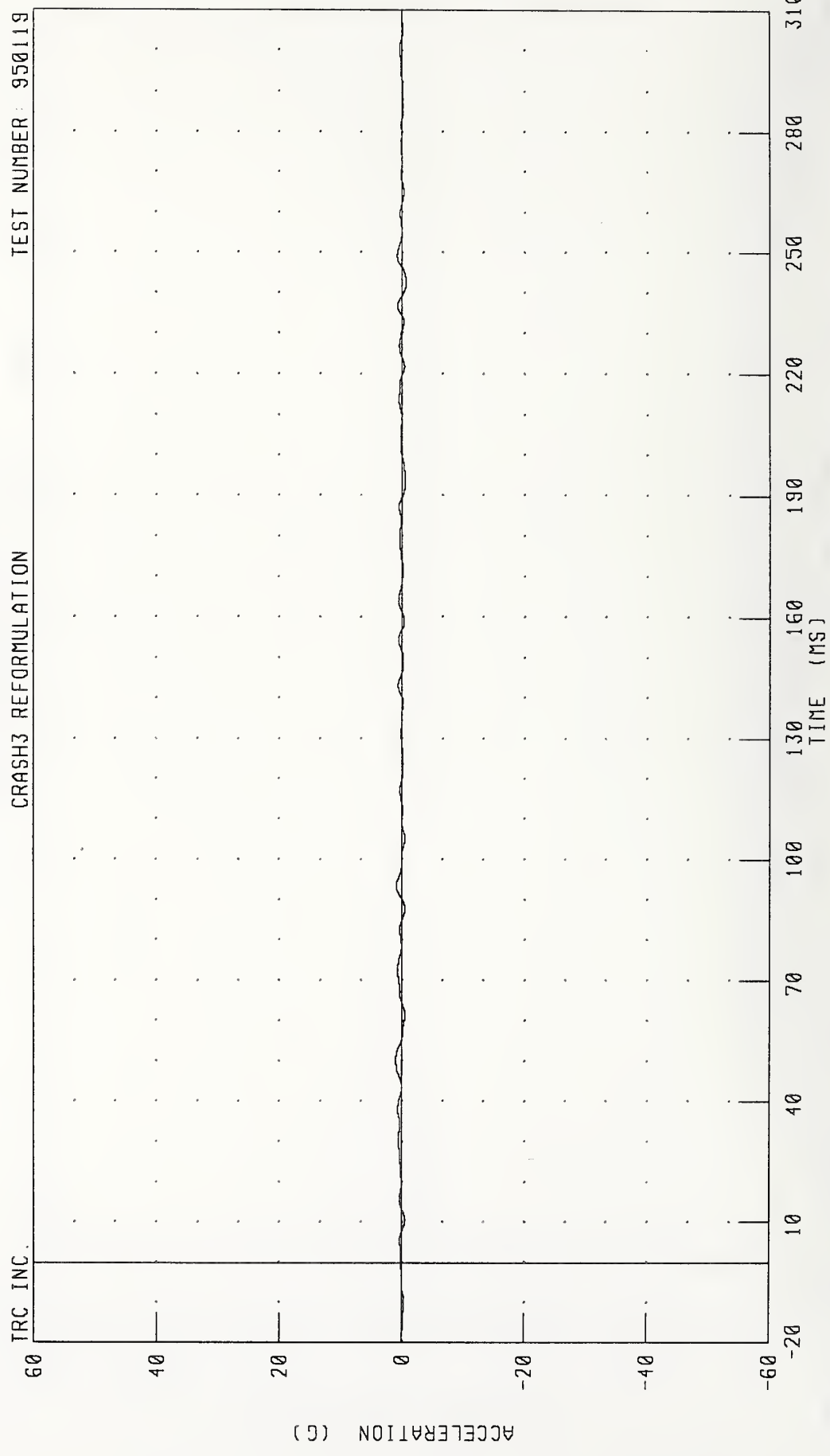
TIME (MS)

PEAK DATA: 120.75 MM @ 84.48 MS; -0.47 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
 RIGHT FRONT SILL Y-AXIS ACCELERATION

TEST NUMBER: 950119

CRASH3 REFORMULATION



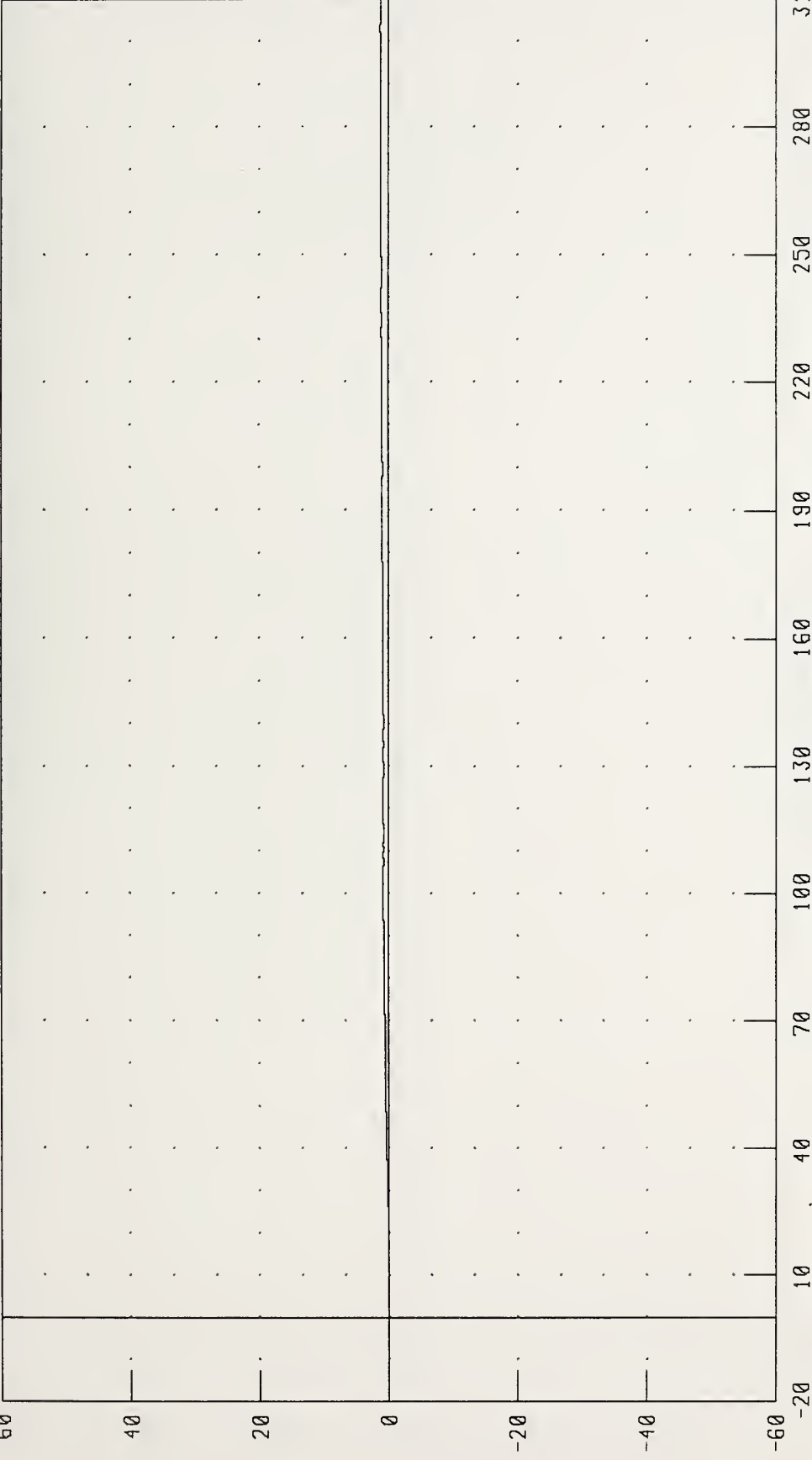
CHANNEL: RFSYG1 FILTER: CH. CLASS 60

PEAK DATA: 0.96 G @ 50.08 MS, -0.70 G @ 242.56 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
RIGHT FRONT SILL Y-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC



CHANNEL: RFSYV1 FILTER: CH CLASS 180

PEAK DATA: 1.29 KM/H @ 302.96 MS, -0.02 KM/H @ 13.04 MS

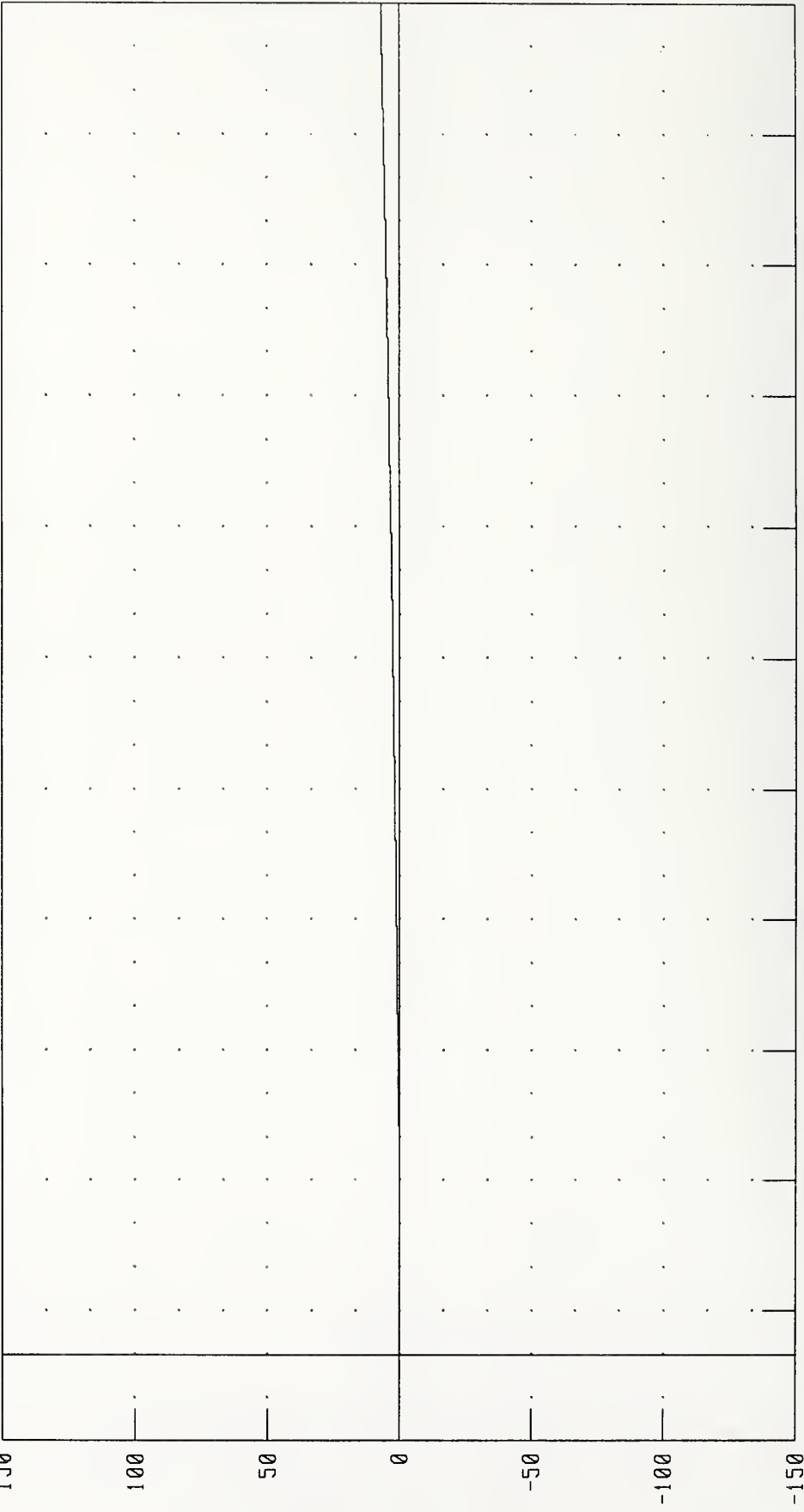
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

RIGHT FRONT SILL Y-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TRC INC.

TEST NUMBER 950119



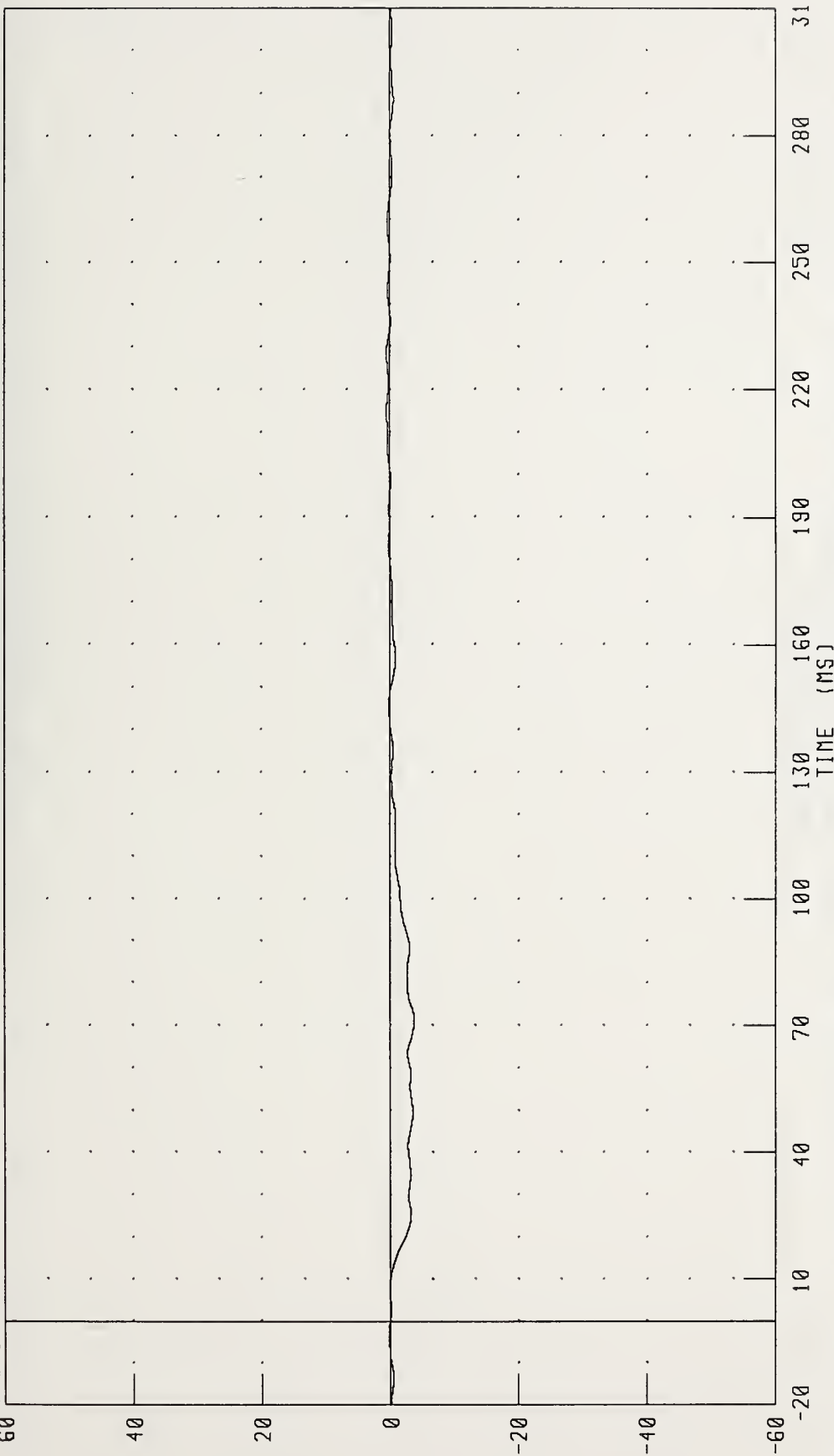
CHANNEL: RFSY01 FILTER: CH CLASS 180

PEAK DATA: 70 04 MM @ 310 00 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
LEFT REAR SEAT X-AXIS ACCELERATION

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC



CHANNEL TLRXG1 FILTER CH CLASS 60

PEAK DATA: 0.49 G @ 214.00 MS, -3.74 G @ 71.12 MS

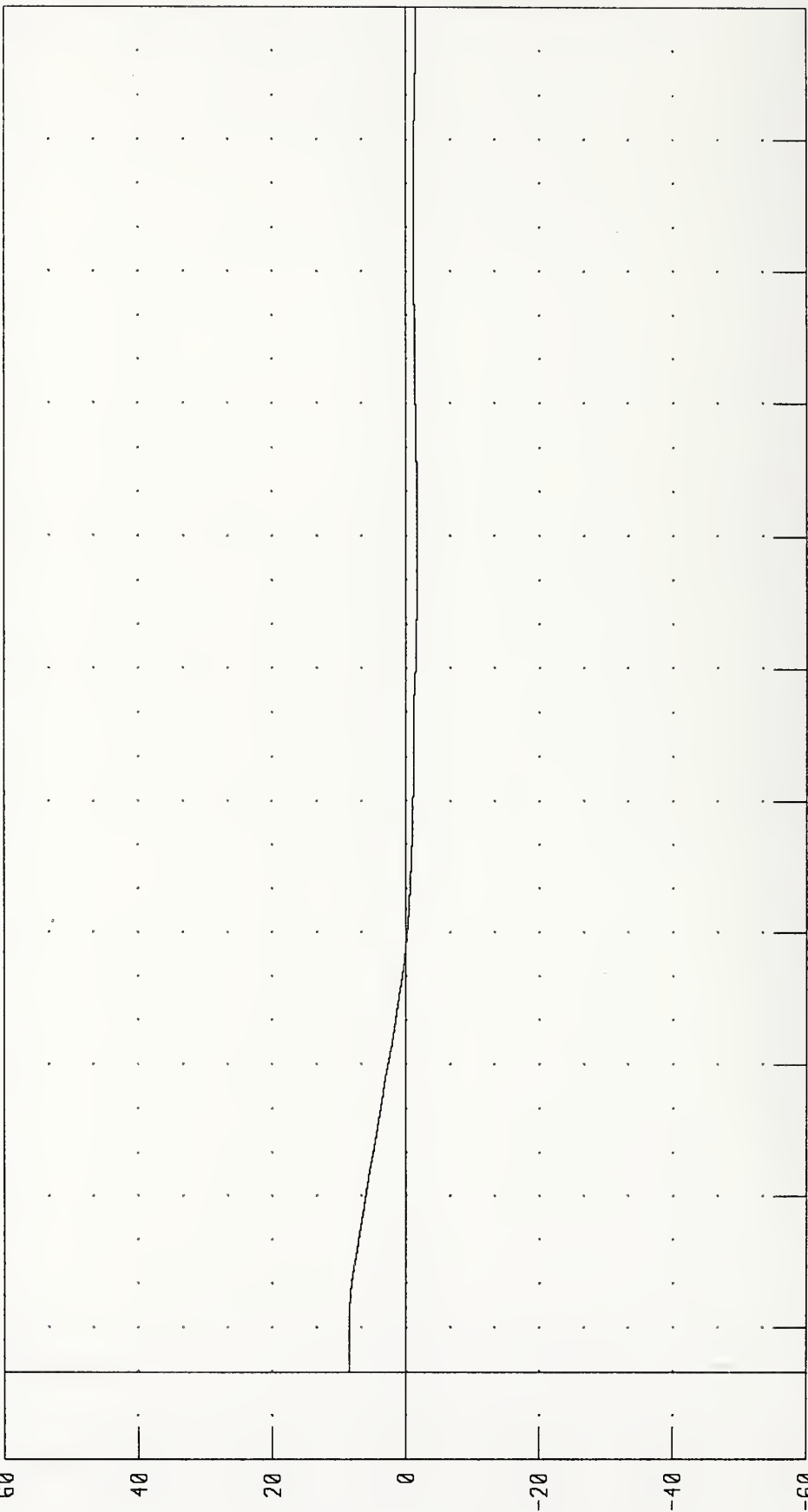
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

LEFT REAR SEAT X-AXIS VELOCITY

CRASH3 REFORMULATION

TRC INC.

TEST NUMBER 950119



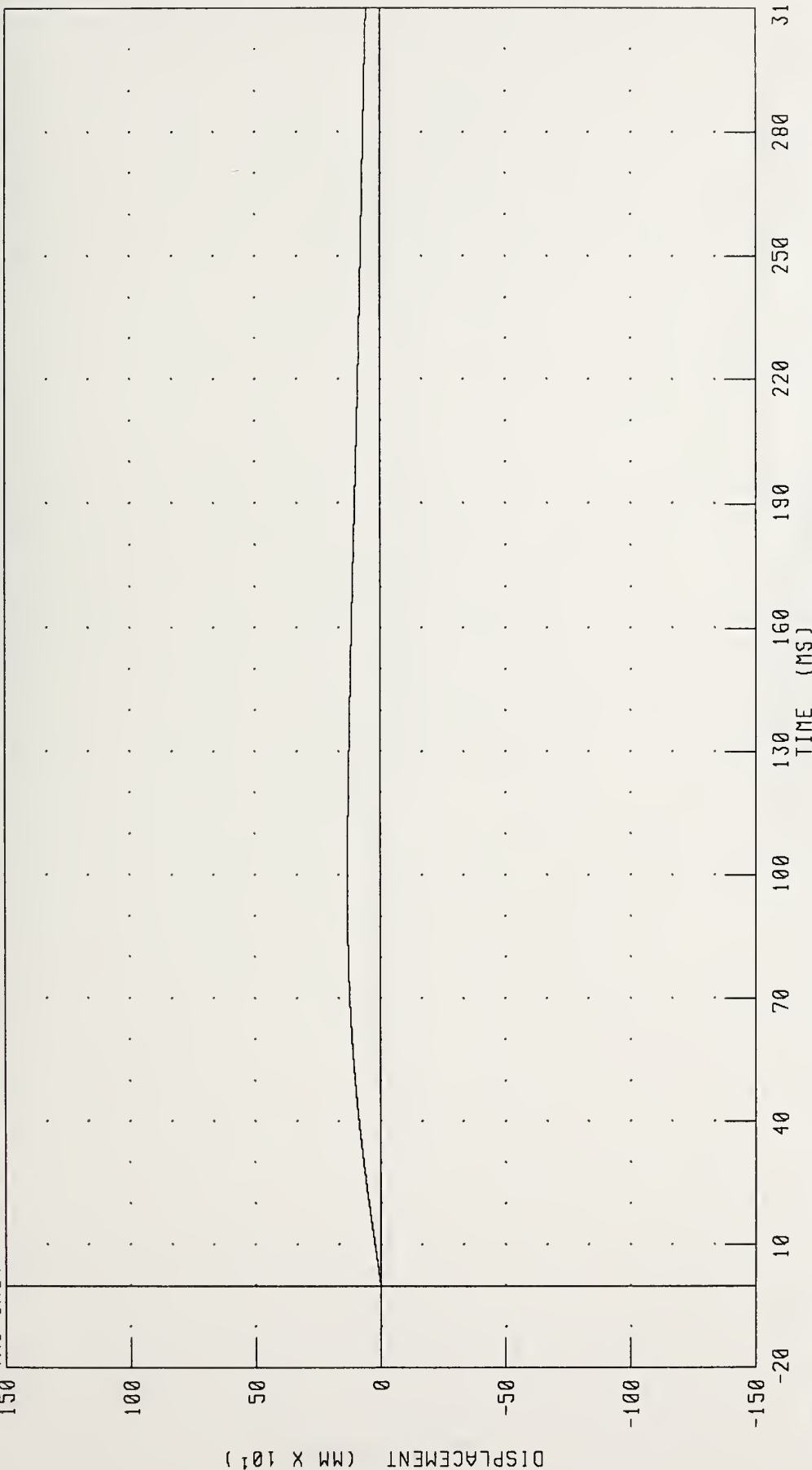
CHANNEL: TLRXV1 FILTER: CH. CLASS 180

PEAK DATA: 8.50 KM/H @ 0.00 MS, -1 68 KM/H @ 179.68 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
LEFT REAR SEAT X-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



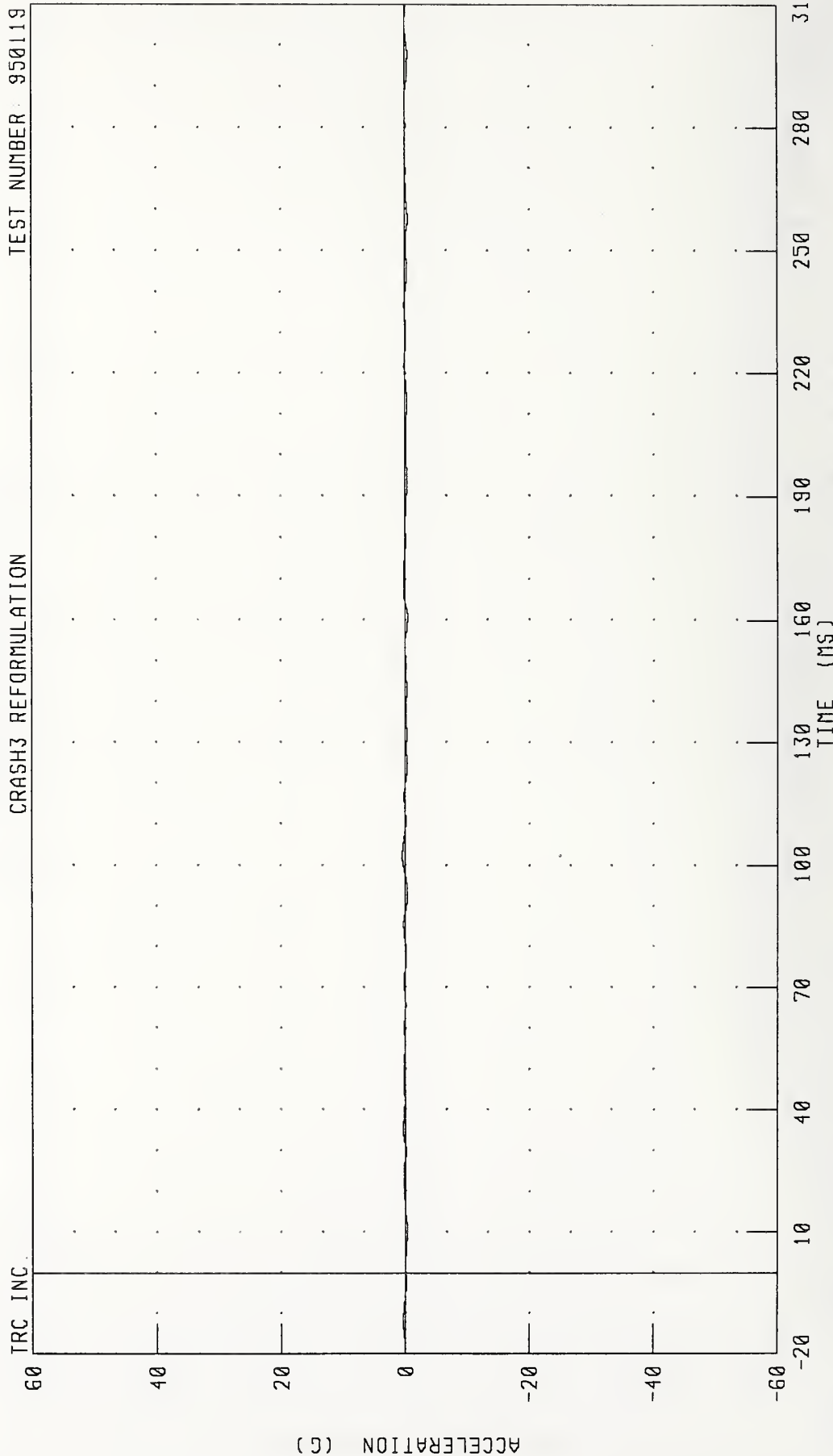
CHANNEL: TLRXD1 FILTER: CH. CLASS 180 PEAK DATA: 131.61 MM @ 96.40 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

LEFT REAR SEAT Y-AXIS ACCELERATION

TEST NUMBER: 950119

CRASH3 REFORMULATION



CHANNEL: TLRYG1 FILTER: CH CLASS 60

PEAK DATA: 0.47 G @ 102.40 MS, -0.45 G @ 160.64 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
LEFT REAR SEAT Y-AXIS VELOCITY

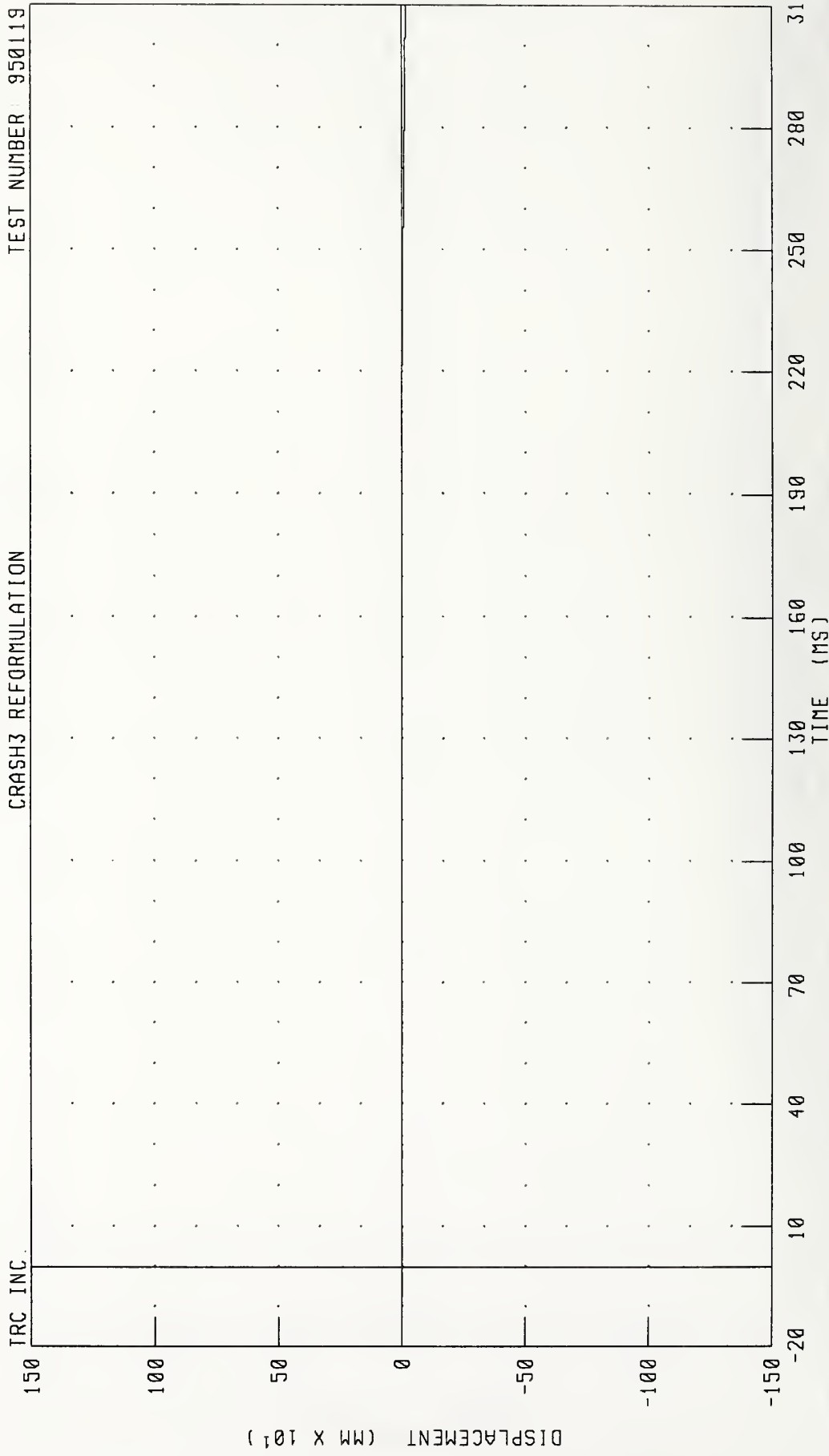
CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



CHANNEL: TLRYV1 FILTER: CH CLASS 180

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
LEFT REAR SEAT Y-AXIS DISPLACEMENT



CHANNEL: TLRYD1 FILTER: CH. CLASS 180

PEAK DATA: 2 36 MM @ 138 48 MS, -16 46 MM @ 310 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
RIGHT REAR SEAT X-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC.

60

40

20

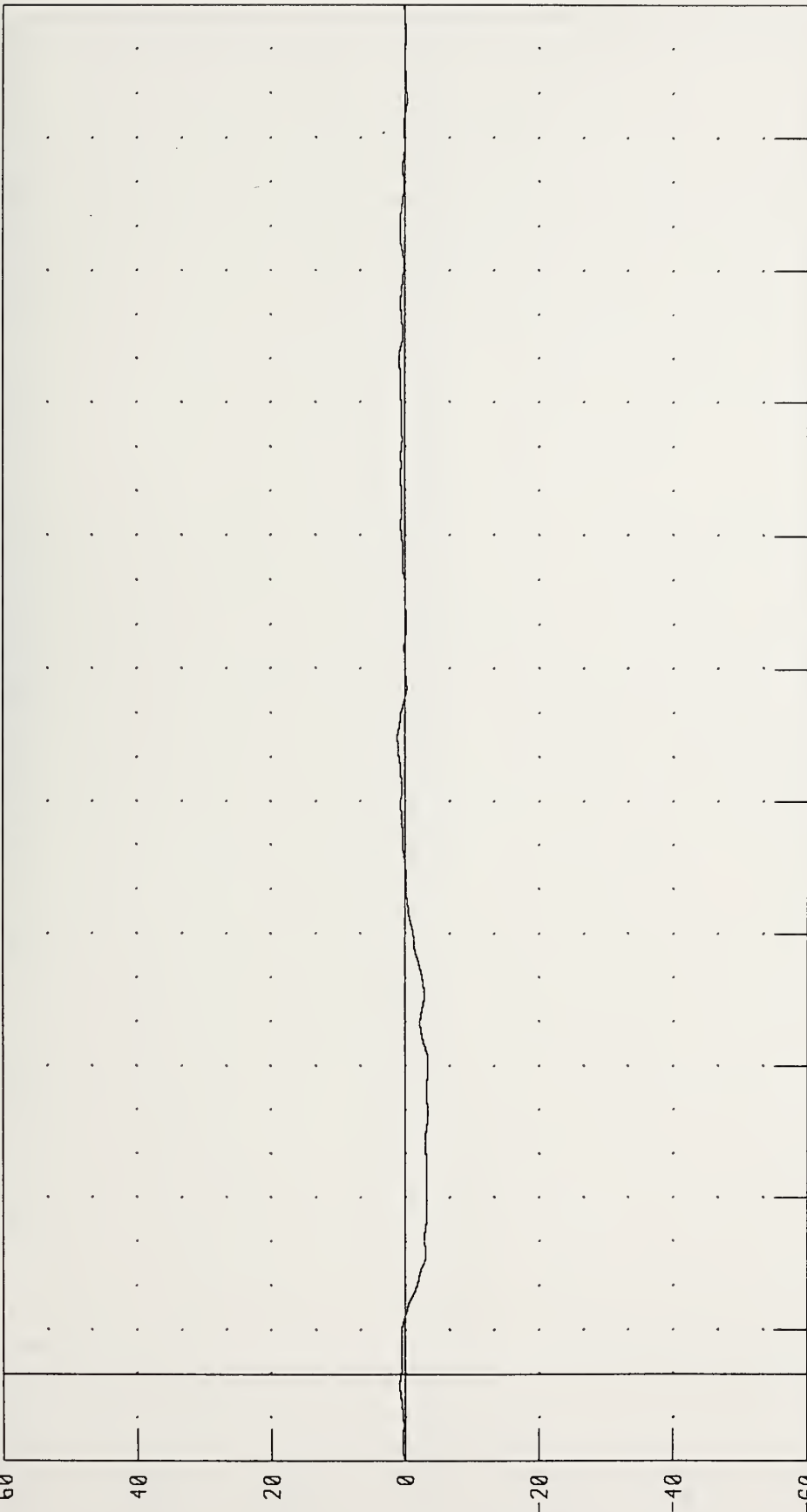
0

-20

-40

-60

ACCELERATION (G)



310 280 250 220 190 160 130 100 70 40 10 -20 -40 -60

TIME (MS)

CHANNEL: TRRXG1 FILTER: CH CLASS 60

PEAK DATA: 1.14 G @ 144.56 MS, -3.44 G @ 70.72 MS

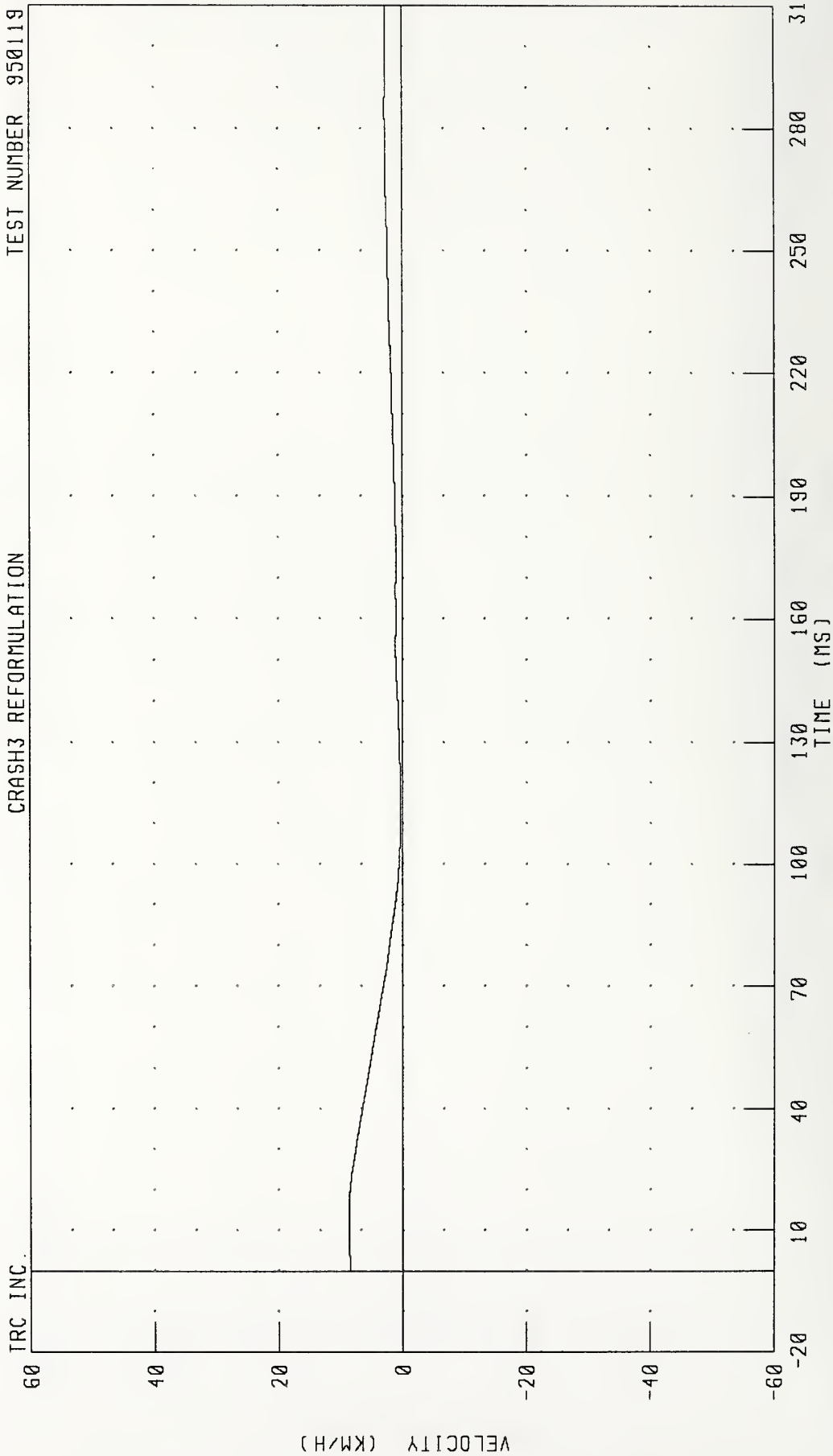
TEST NUMBER 950119

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

RIGHT REAR SEAT X-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER 950119



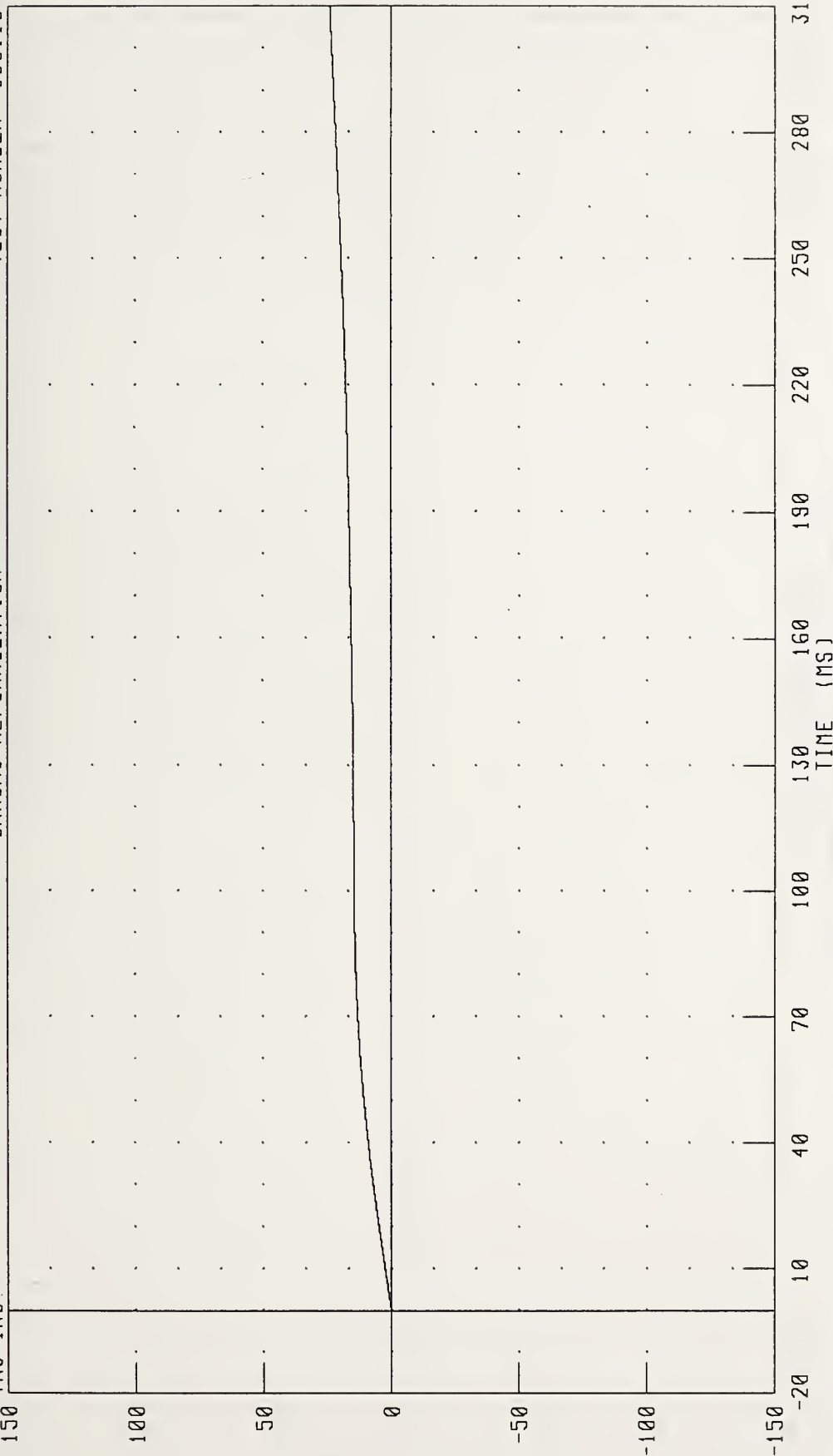
CHANNEL: TRRXV1 FILTER: CH. CLASS 180

PEAK DATA: 8.72 KM/H @ 12.80 MS; 0.33 KM/H @ 117.36 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
 RIGHT REAR SEAT X-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



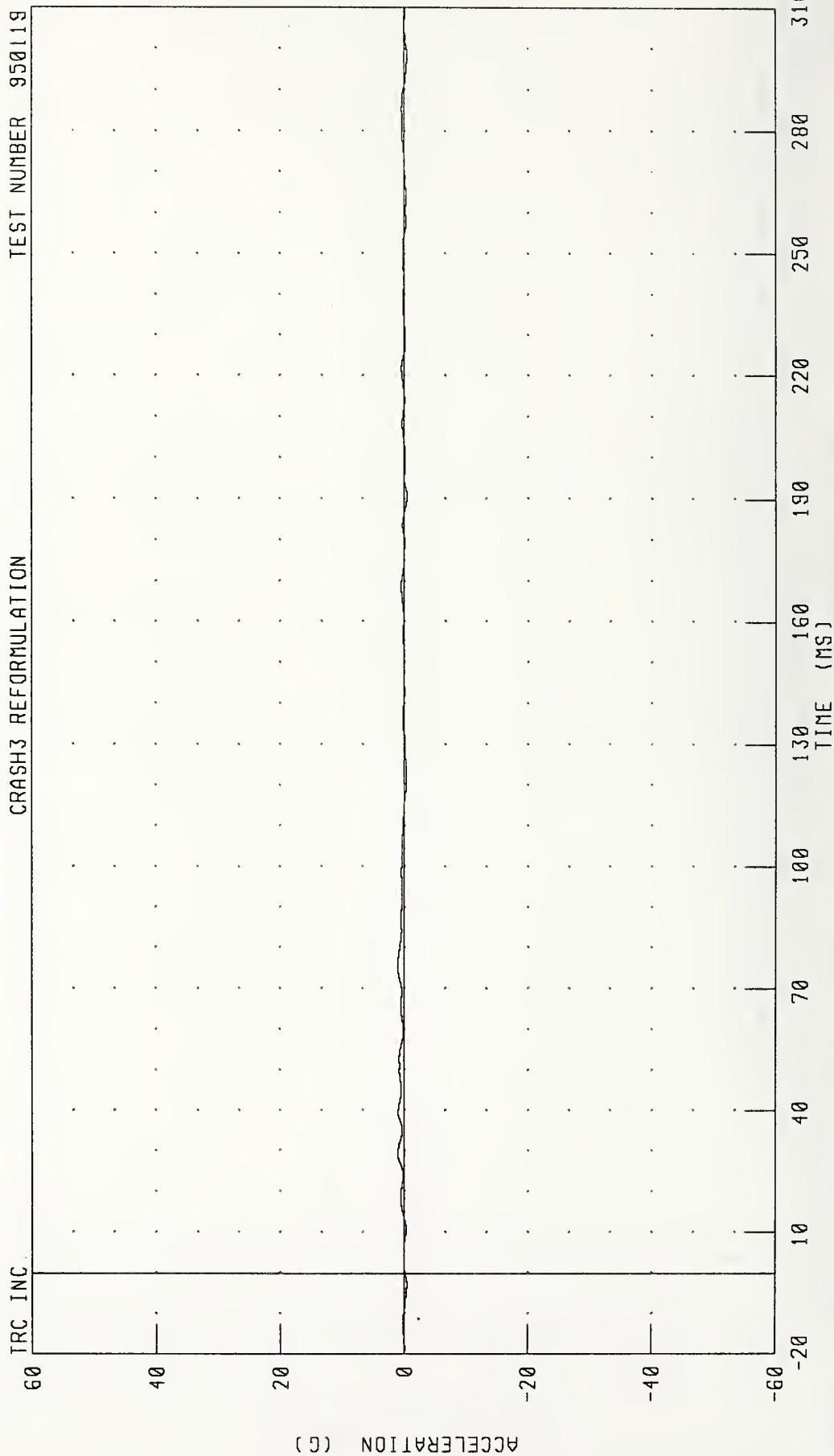
CHANNEL: TRRXD1 FILTER: CH CLASS: 180

PEAK DATA: 239.73 MM @ 310.00 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

RIGHT REAR SEAT Y-AXIS ACCELERATION

CRASH3 REFORMULATION TEST NUMBER 950119

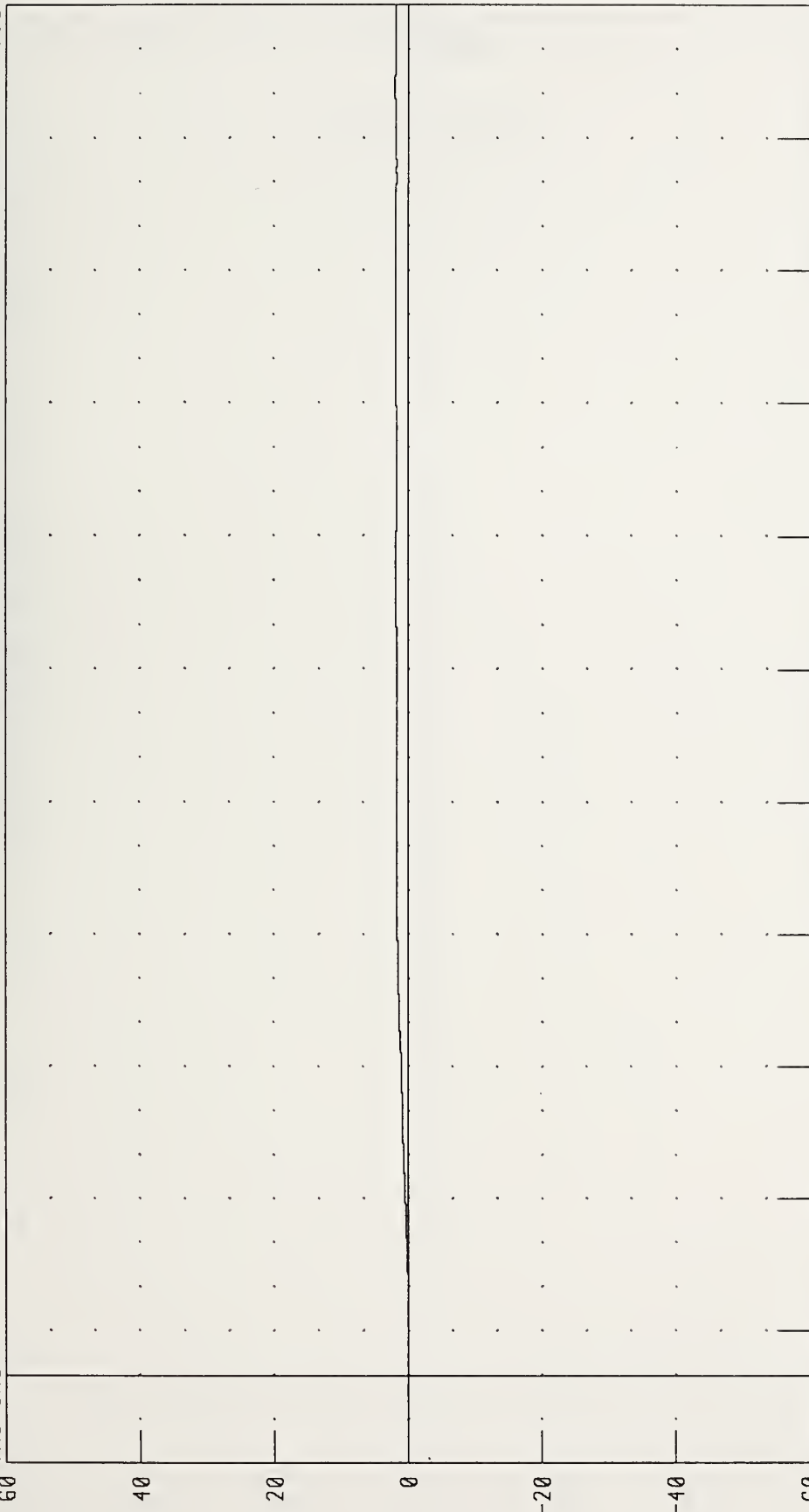


1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5
RIGHT REAR SEAT Y-AXIS VELOCITY

CRASH3 REFORMULATION

TRC INC.

TEST NUMBER 950119

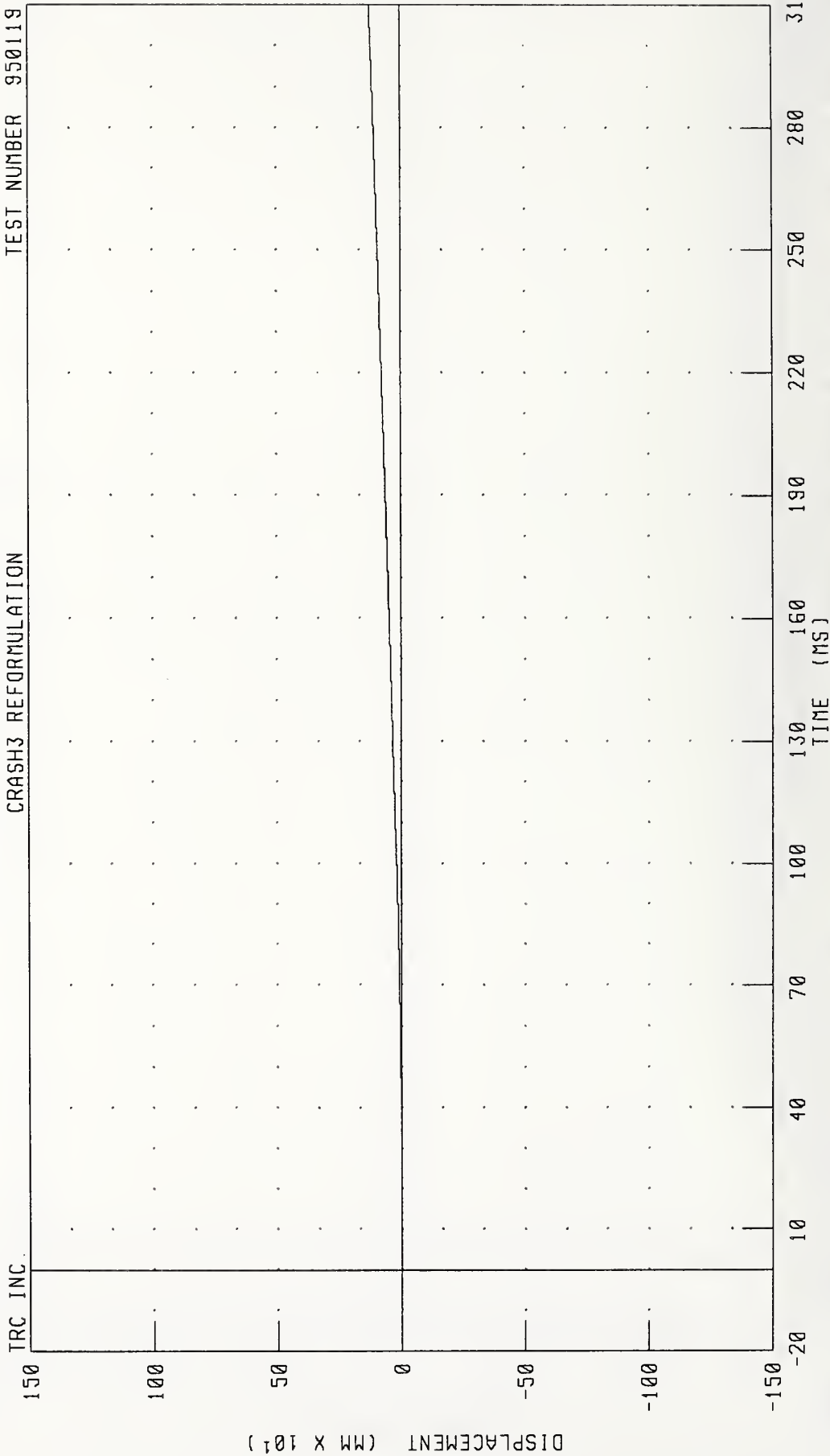


CHANNEL TRRYV1 FILTER CH. CLASS 180 PEAK DATA 1.97 KM/H @ 290 32 MS, -0.04 KM/H @ 13 12 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 1 OF 5

RIGHT REAR SEAT Y-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER 950119



CHANNEL: TRRYD1 FILTER: CH CLASS 180

Data Plots

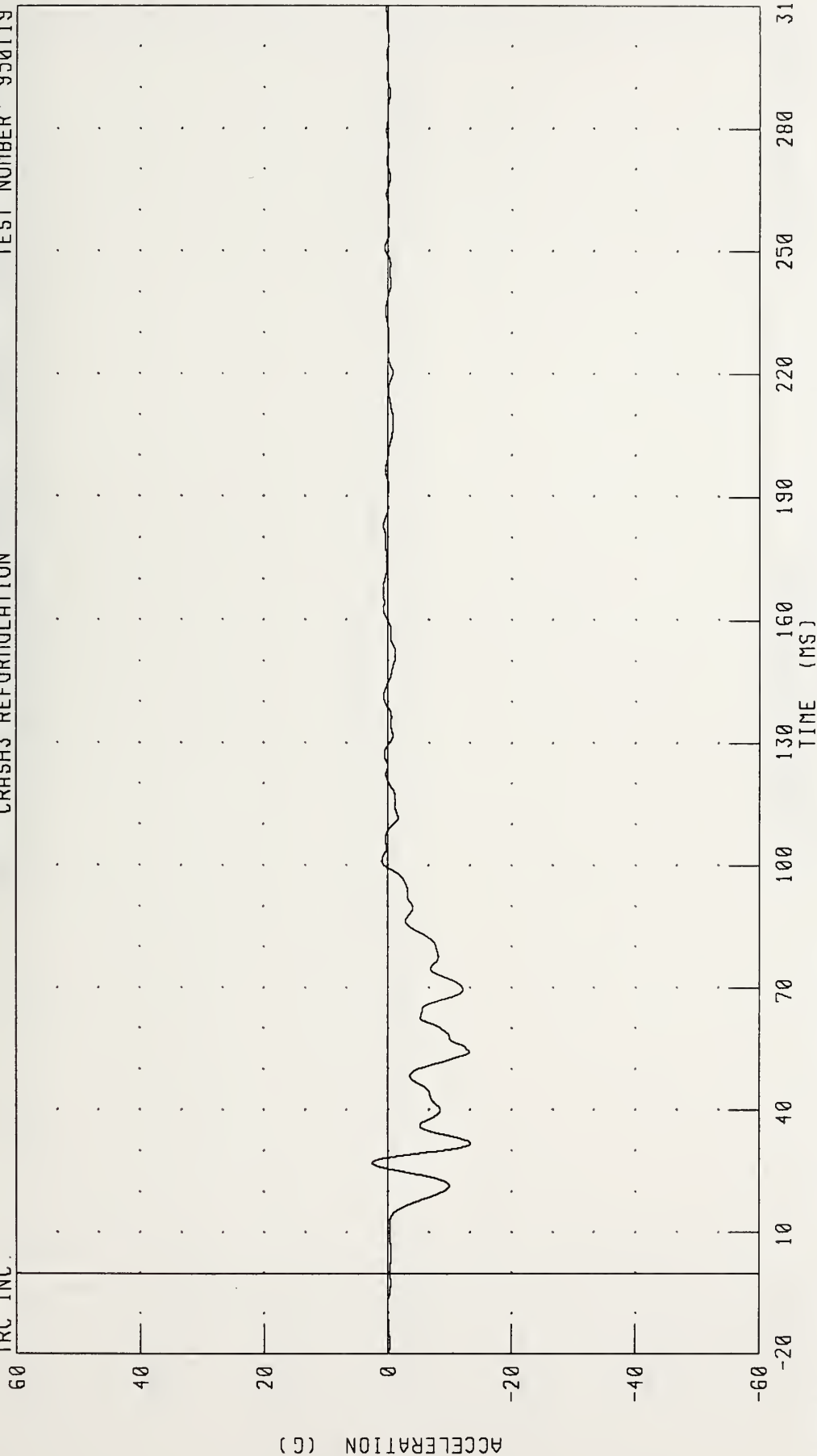
Test No. 950119-2



1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
 VEHICLE CG X-AXIS ACCELERATION

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



CHANNEL: VCGXG1 FILTER: CH CLASS 60

TIME (MS)

PEAK DATA: 2.56 G @ 27 12 MS, -13.41 G @ 31 92 MS

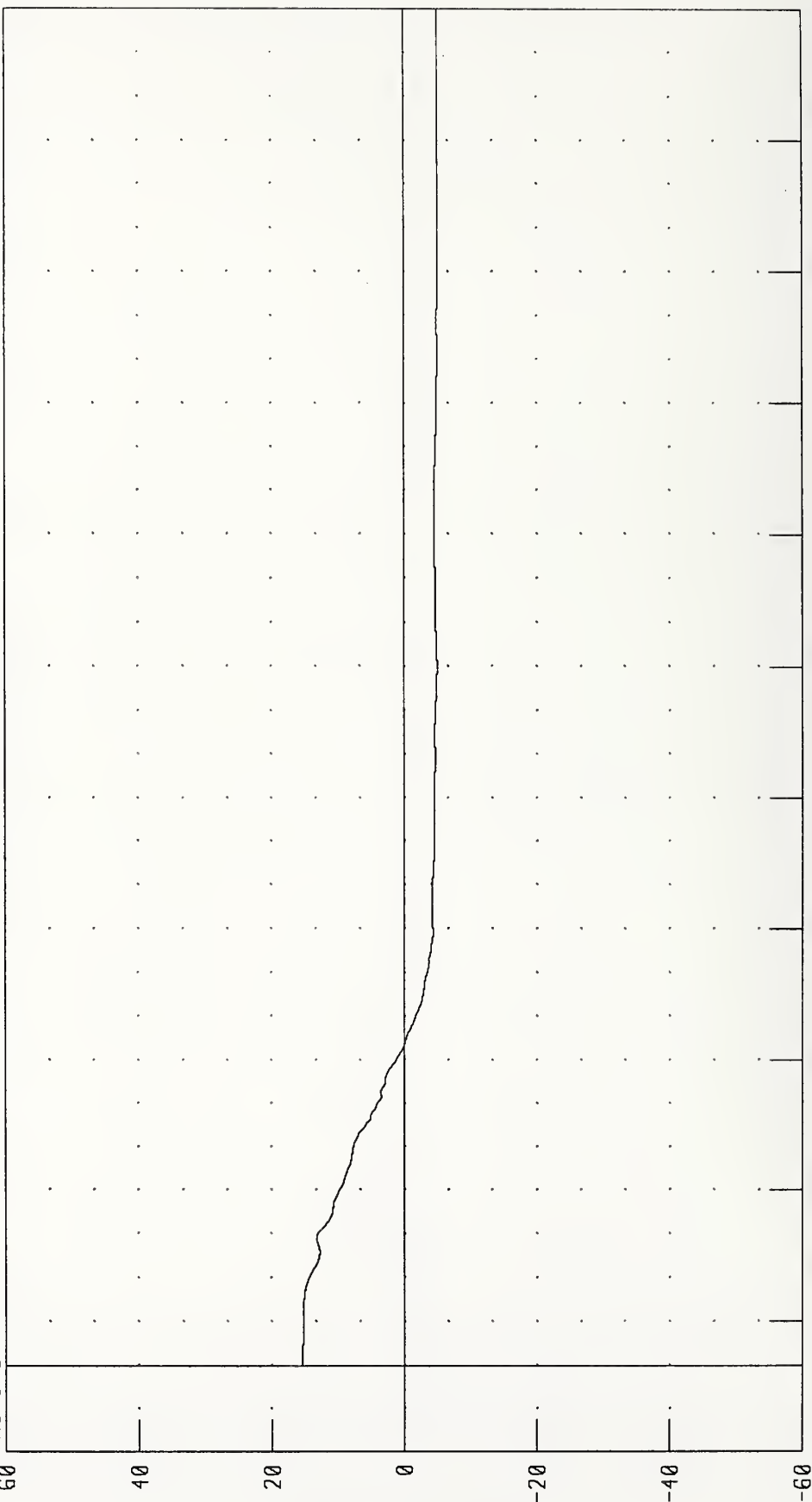
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

VEHICLE CG X-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC

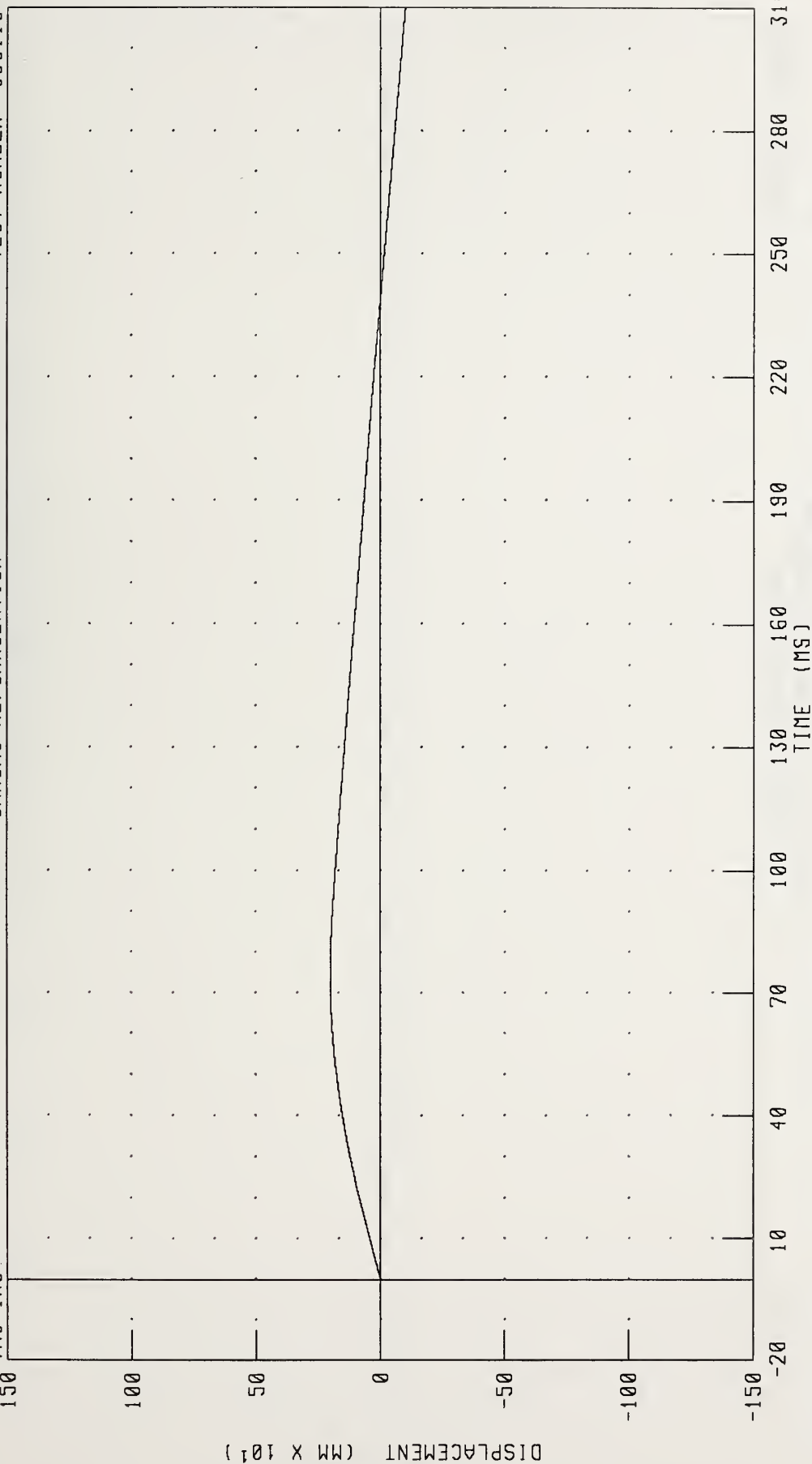


CHANNEL: VCGXV1 FILTER: CH CLASS 180 PEAK DATA: 15 40 KM/H @ 0 00 MS, -5 11 KM/H @ 249 28 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
VEHICLE CG X-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



CHANNEL: VCGXD1 FILTER: CH CLASS 180

TIME (MS)

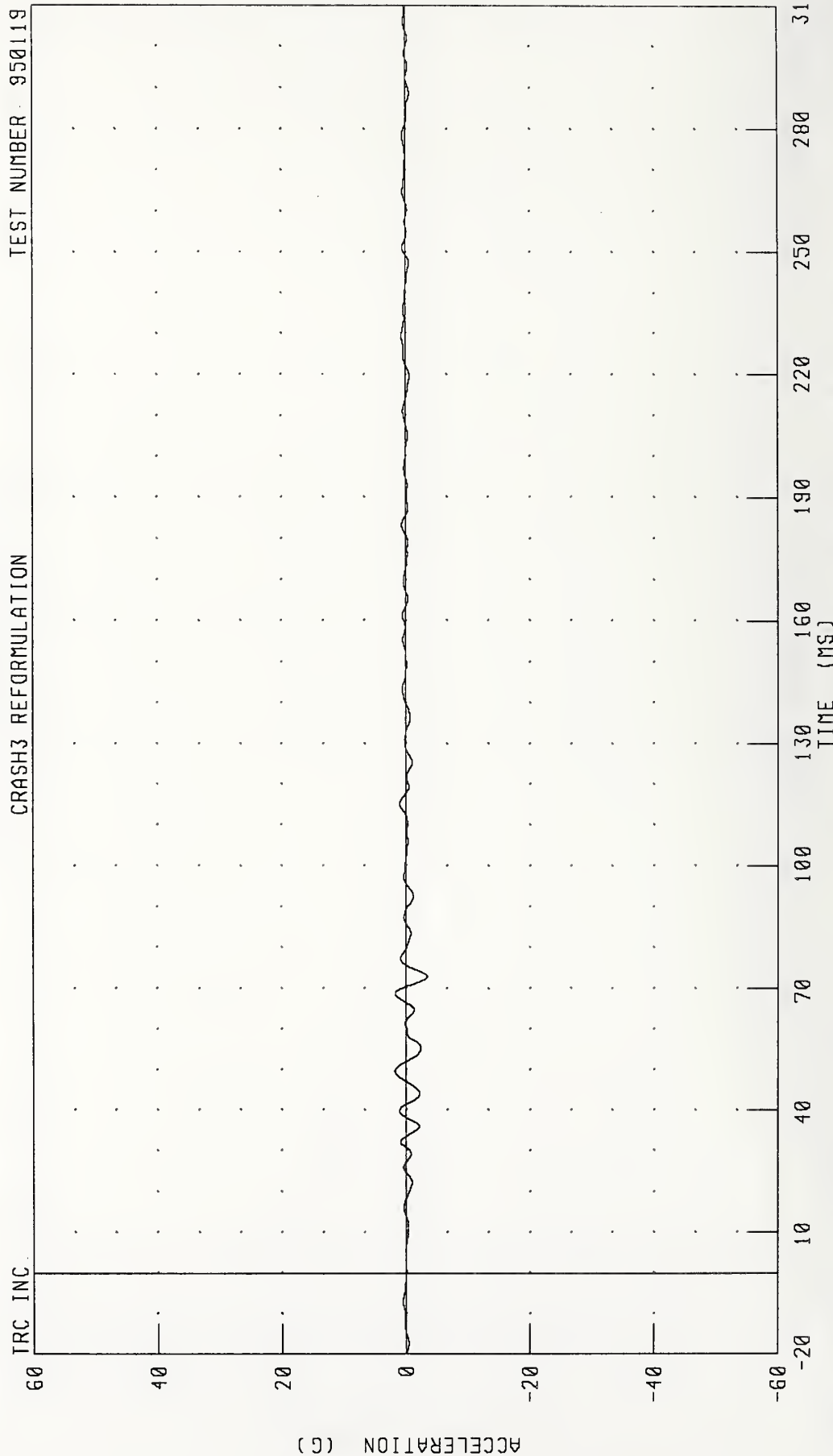
PEAK DATA: 200.90 MM @ 73.44 MS, -99.79 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

VEHICLE CG Y-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119



CHANNEL: VCGY61 FILTER: CH. CLASS 60

PEAK DATA: 1.80 G @ 49.60 MS, -3.49 G @ 72.88 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

VEHICLE CG Y-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC



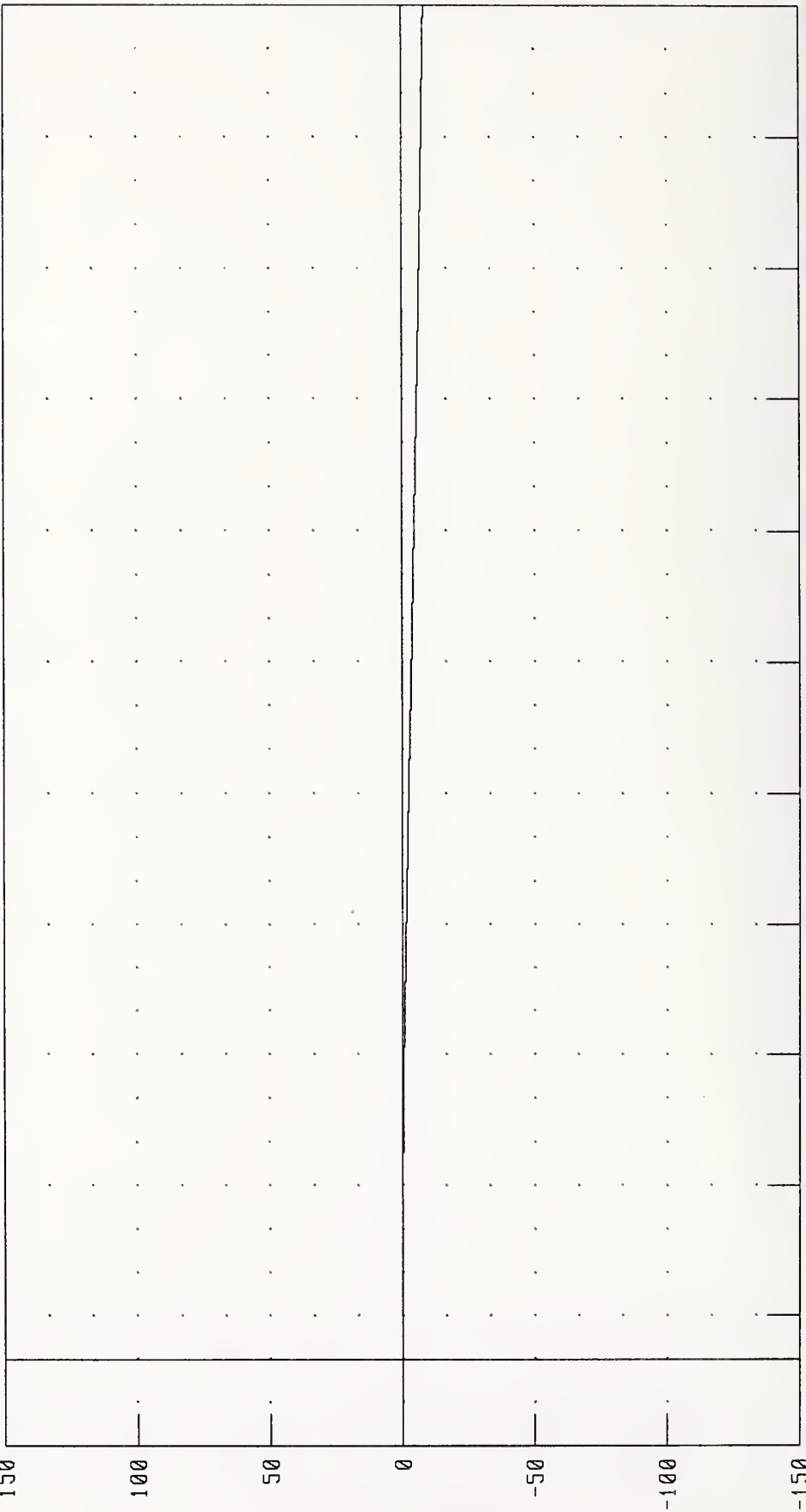
CHANNEL: VCGYV1 FILTER: CH. CLASS 180

PEAK DATA 0.01 KM/H @ 7.60 MS, -1.40 KM/H @ 139.76 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
VEHICLE CG Y-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



CHANNEL VCGYD1 FILTER CH CLASS 180

PEAK DATA 0 00 MM @ 0 00 MS, -83 14 MM @ 310 00 MS

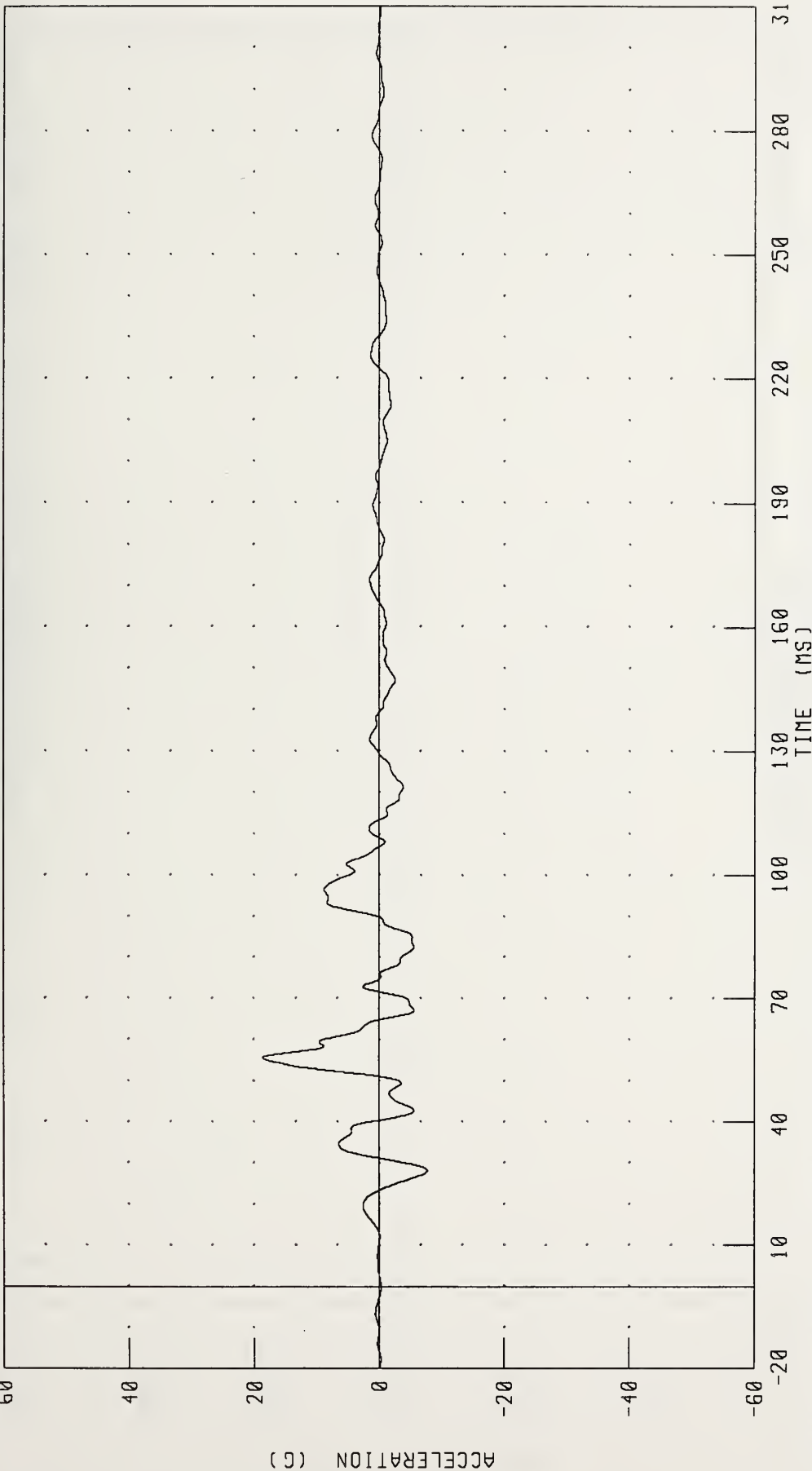
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

VEHICLE CG Z-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.



CHANNEL: VCGZG1 FILTER: CH. CLASS 60

TIME (MS)

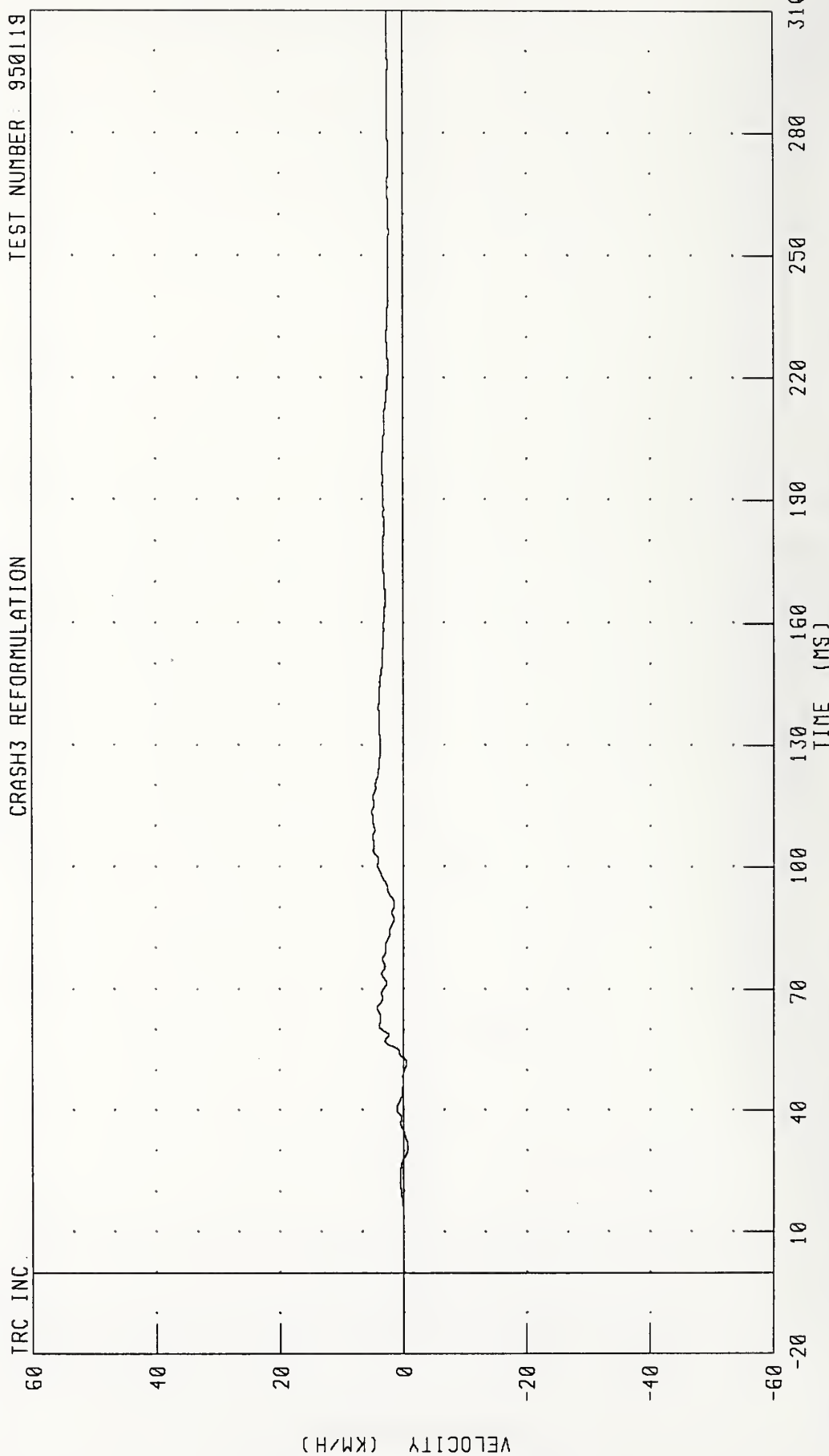
PEAK DATA: 18.69 G @ 55.60 MS, -7.74 G @ 28.16 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

VEHICLE CG Z-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER: 950119



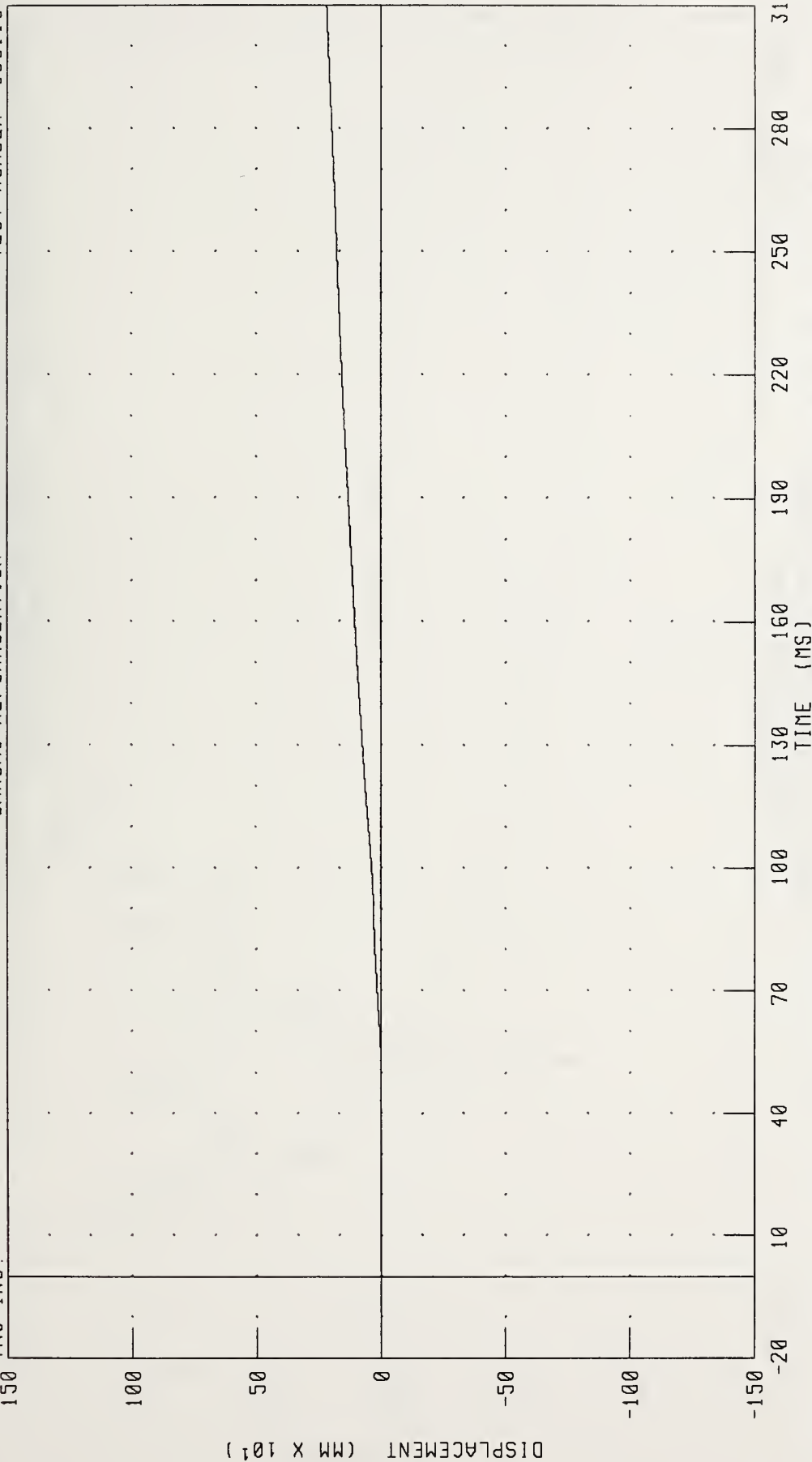
CHANNEL: VCGZV1 FILTER: CH. CLASS 180

PEAK DATA: 5.09 KM/H @ 113.60 MS, -0.72 KM/H @ 31.44 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
VEHICLE CG Z-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



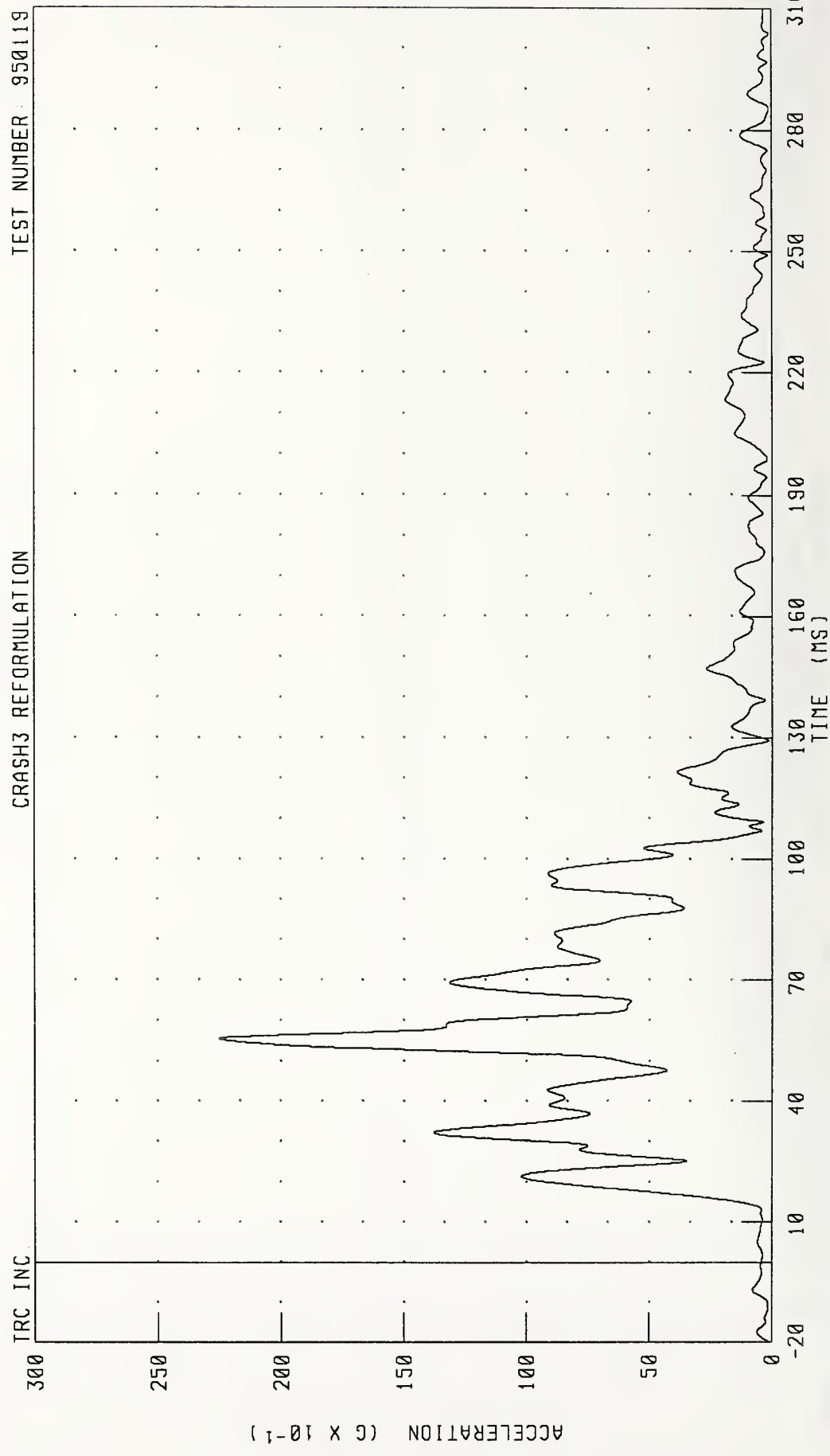
CHANNEL VCGZD1 FILTER: CH. CLASS 180

PEAK DATA 218.68 MM @ 310.00 MS, -0.02 MM @ 6.72 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
 VEHICLE CG RESULTANT ACCELERATION

TEST NUMBER 950119

CRASH3 REFORMULATION



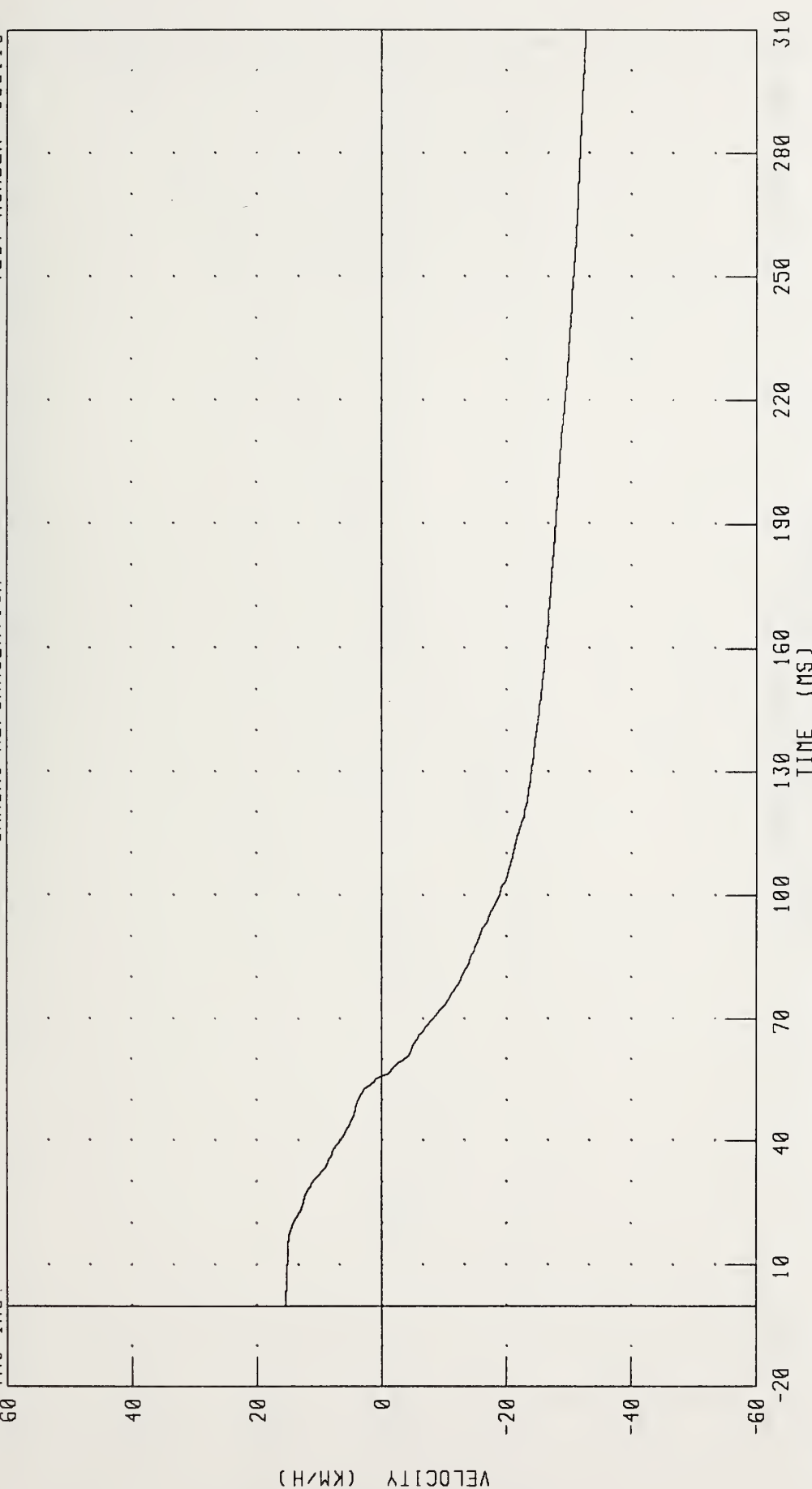
CHANNEL: VCGRG1 FILTER: CH CLASS 60

PEAK DATA: 22.54 G @ 55.52 MS, 0 13 G @ 285.36 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
VEHICLE CG RESULTANT VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119

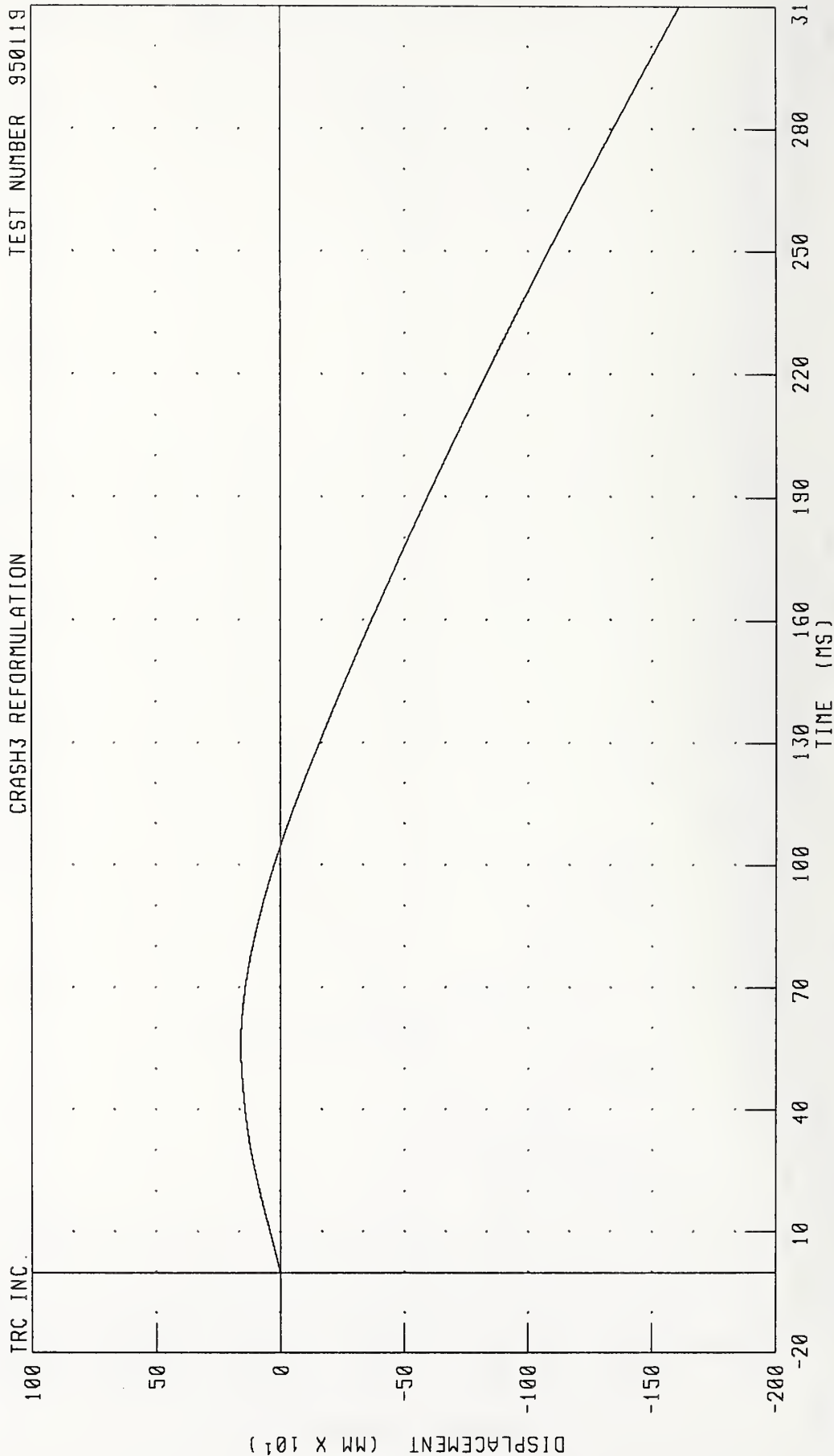
TRC INC.



CHANNEL VCGRV1 FILTER CH CLASS 180

PEAK DATA 15.40 KM/H @ 0 00 MS, -32.68 KM/H @ 310 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
VEHICLE CG RESULTANT DISPLACEMENT

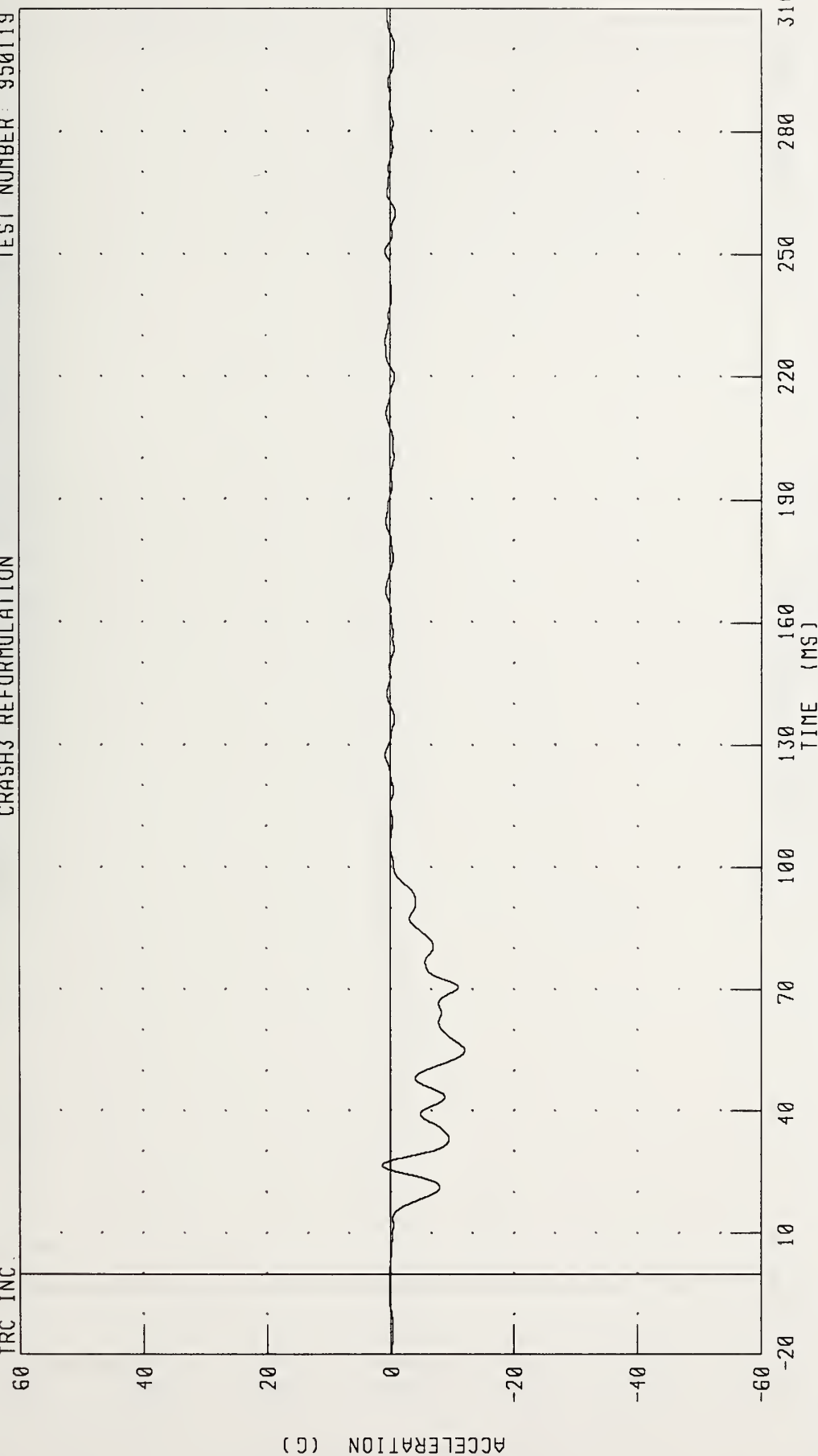


1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
LEFT FRONT STILL X-AXIS ACCELERATION

TEST NUMBER 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL LFSXG1 FILTER CH CLASS 60

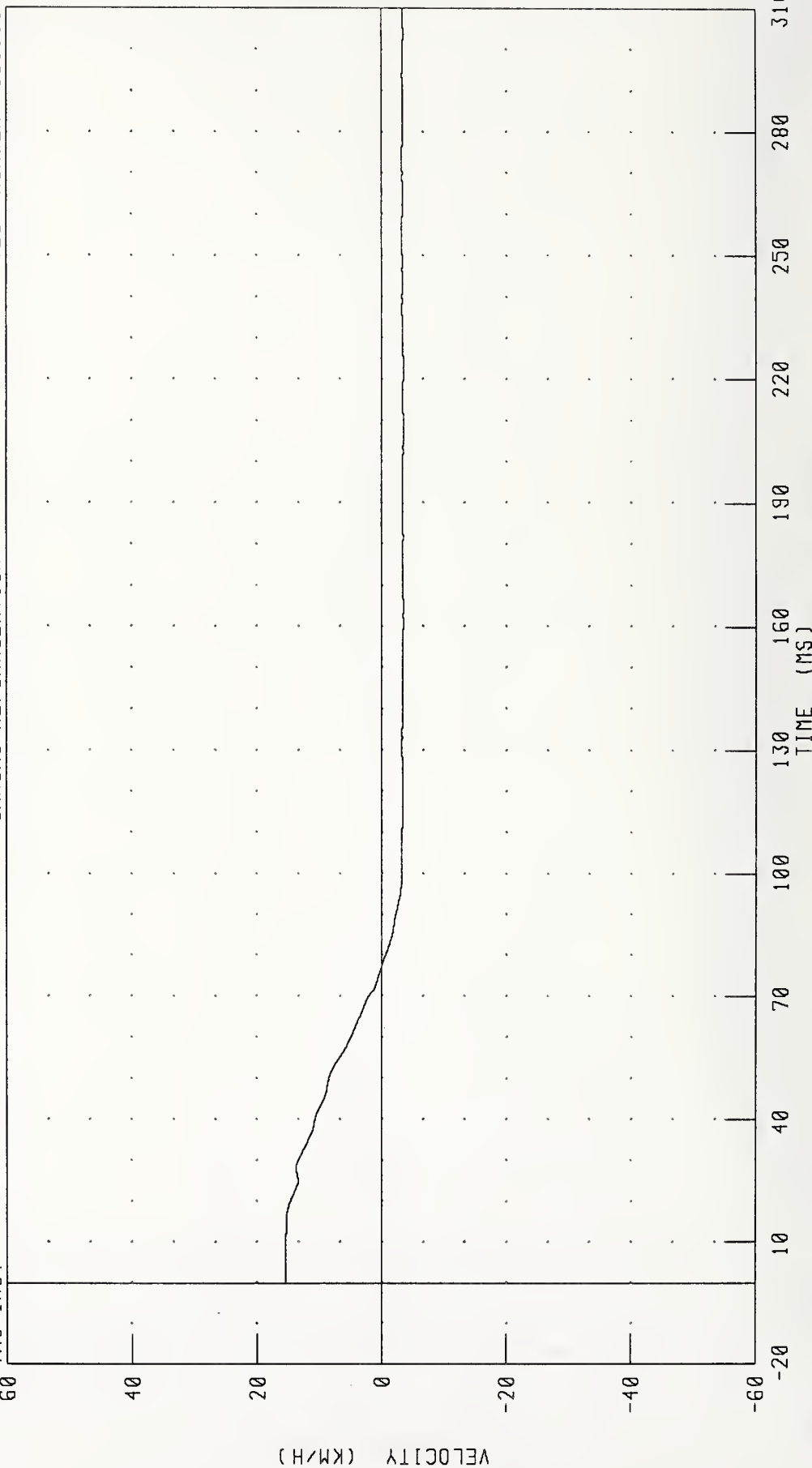
PEAK DATA 1.37 G @ 26 56 MS, -12.09 G @ 54 96 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
LEFT FRONT SILL X-AXIS VELOCITY

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC.



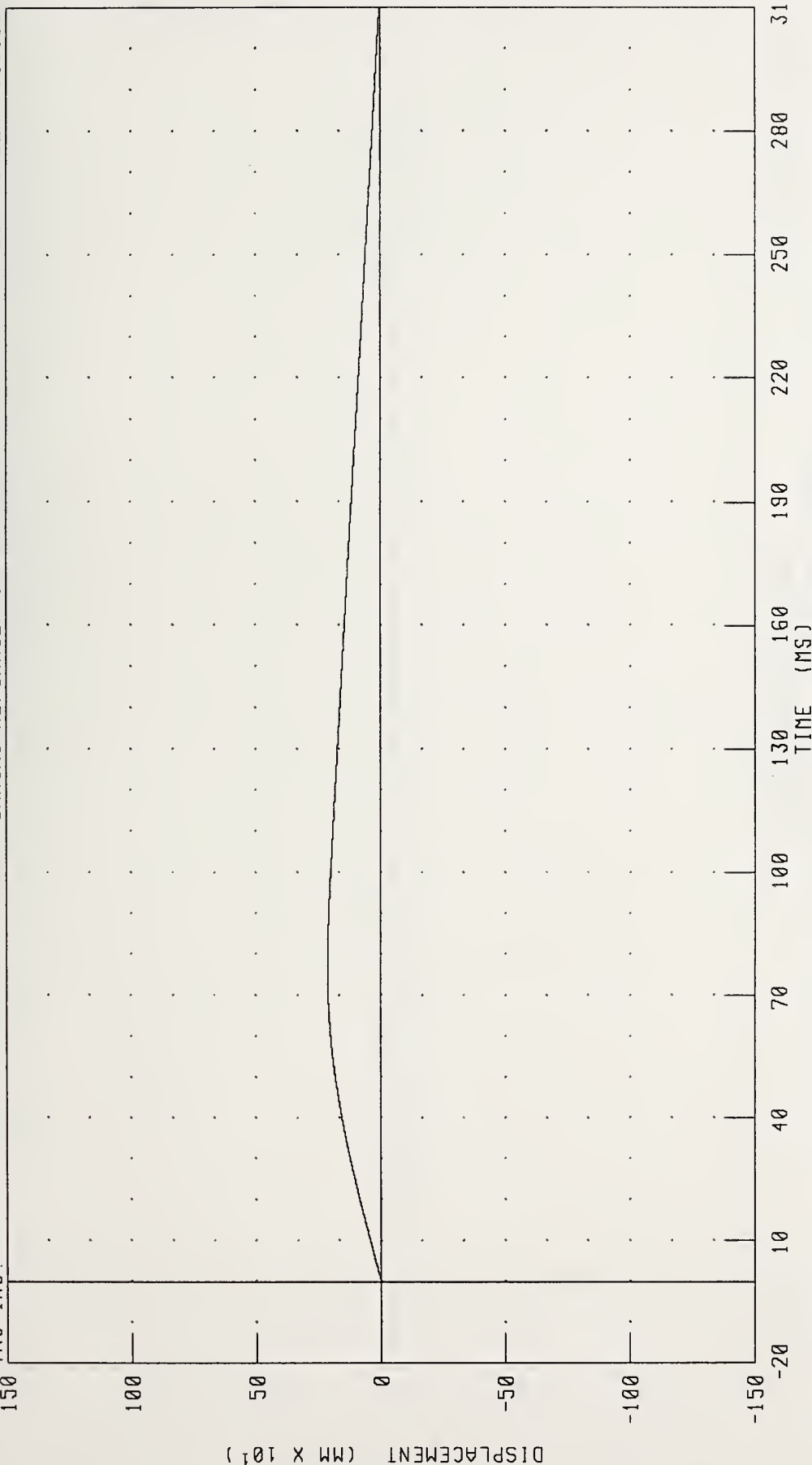
CHANNEL: LFSXV1 FILTER CH. CLASS 180

PEAK DATA: 15.42 KM/H @ 4.32 MS, -3.54 KM/H @ 221.84 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
LEFT FRONT SILL X-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER 950119

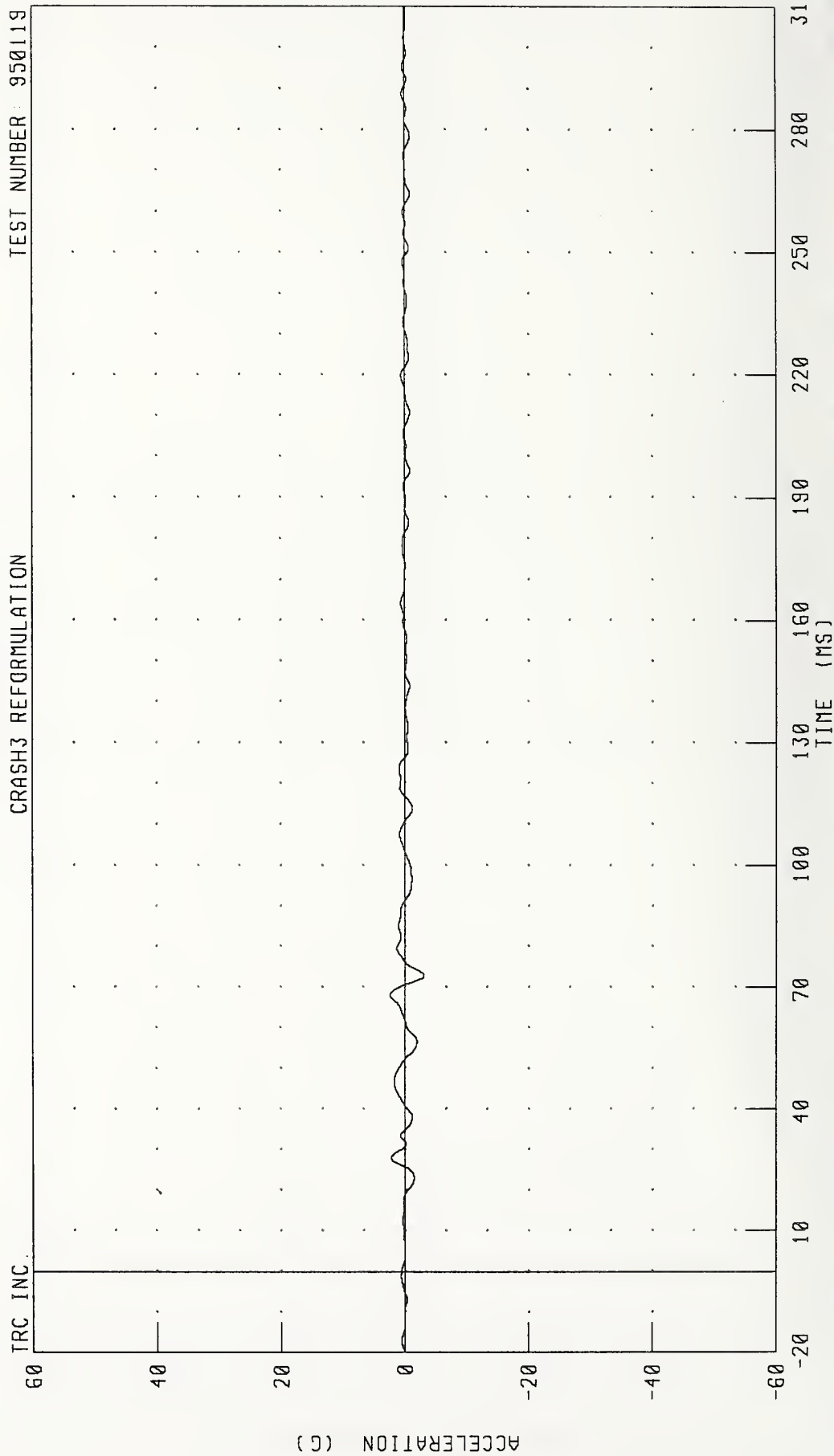
TRC INC.



CHANNEL: LFSXD1 FILTER CH CLASS 180

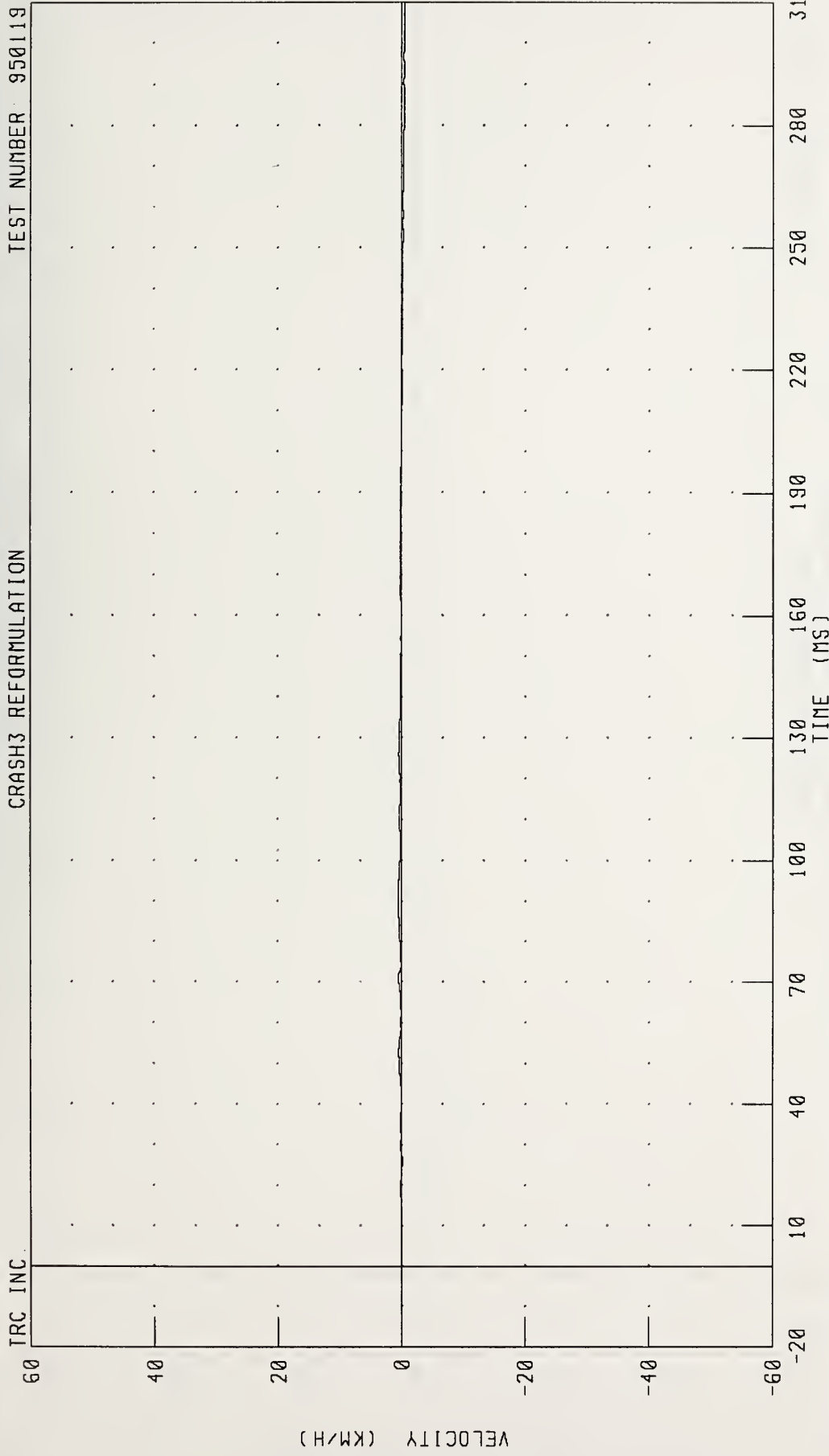
PEAK DATA: 212.74 MM @ 77.36 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
LEFT FRONT SILL Y-AXIS ACCELERATION



CHANNEL: LFSYG1 FILTER: CH CLASS 60

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
LEFT FRONT SILL Y-AXIS VELOCITY

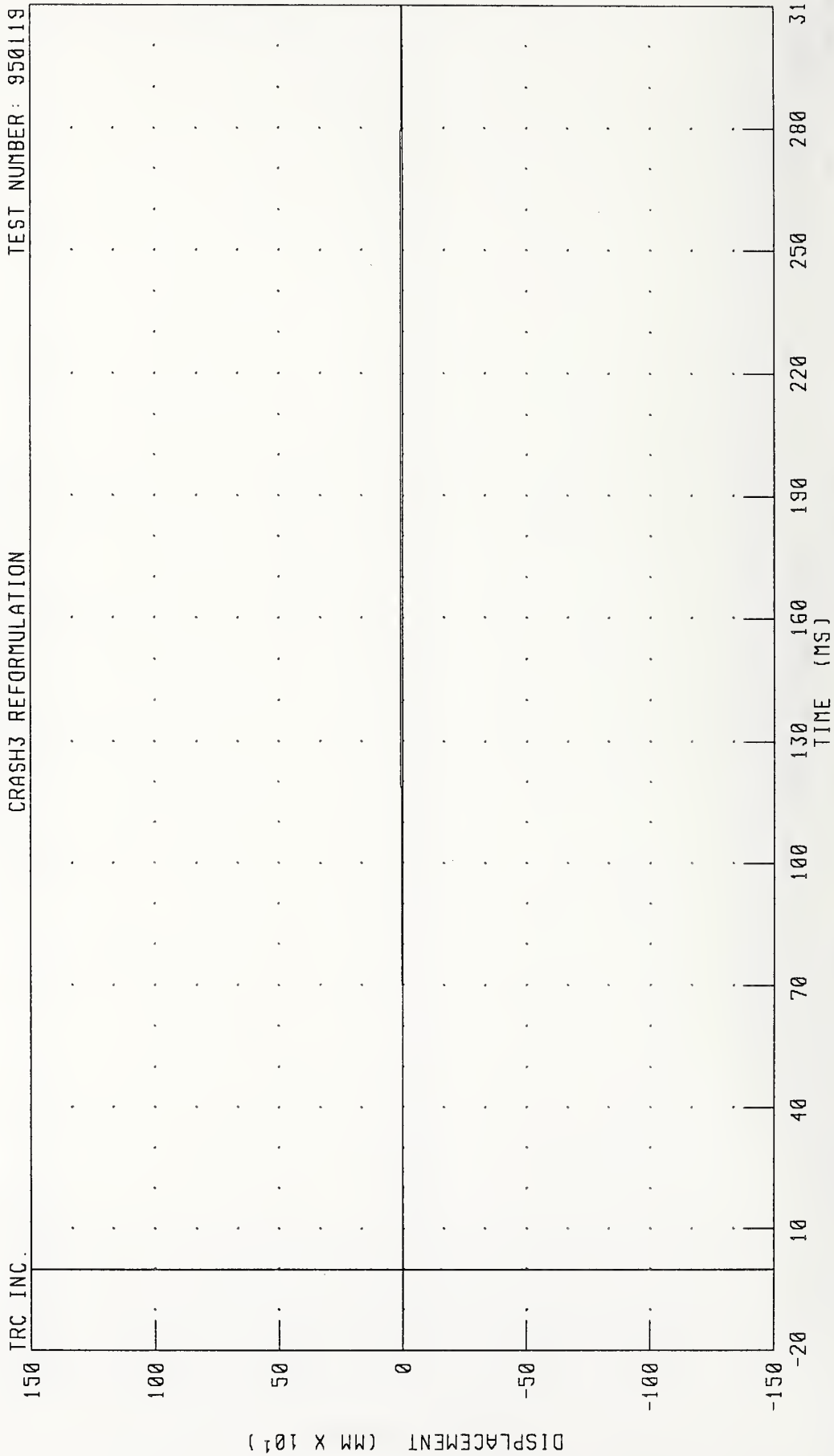


CHANNEL: LFSYV1 FILTER: CH. CLASS 180 PEAK DATA: 0 56 KM/H @ 71 20 MS, -0 50 KM/H @ 287 20 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
LEFT FRONT SILL Y-AXIS DISPLACEMENT

TEST NUMBER: 950119

CRASH3 REFORMULATION



CHANNEL: LFSYD1 FILTER: CH CLASS 180

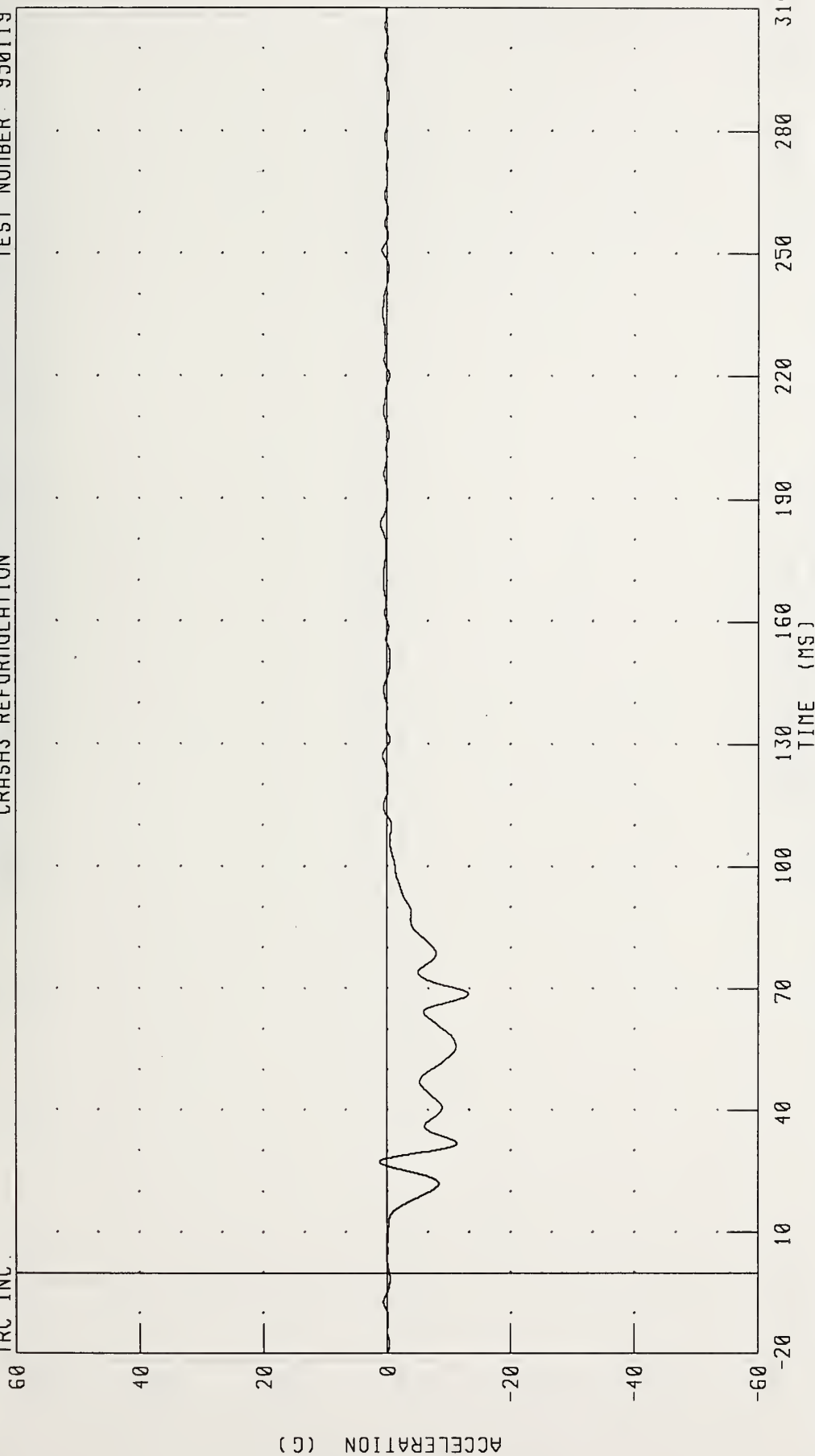
PEAK DATA: 10.56 MM @ 209.36 MS, 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
RIGHT FRONT SILL X-AXIS ACCELERATION

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL RFSXG1 FILTER: CH. CLASS 60

PEAK DATA: 1 19 G @ 27 28 MS, -13 13 G @ 68 72 MS

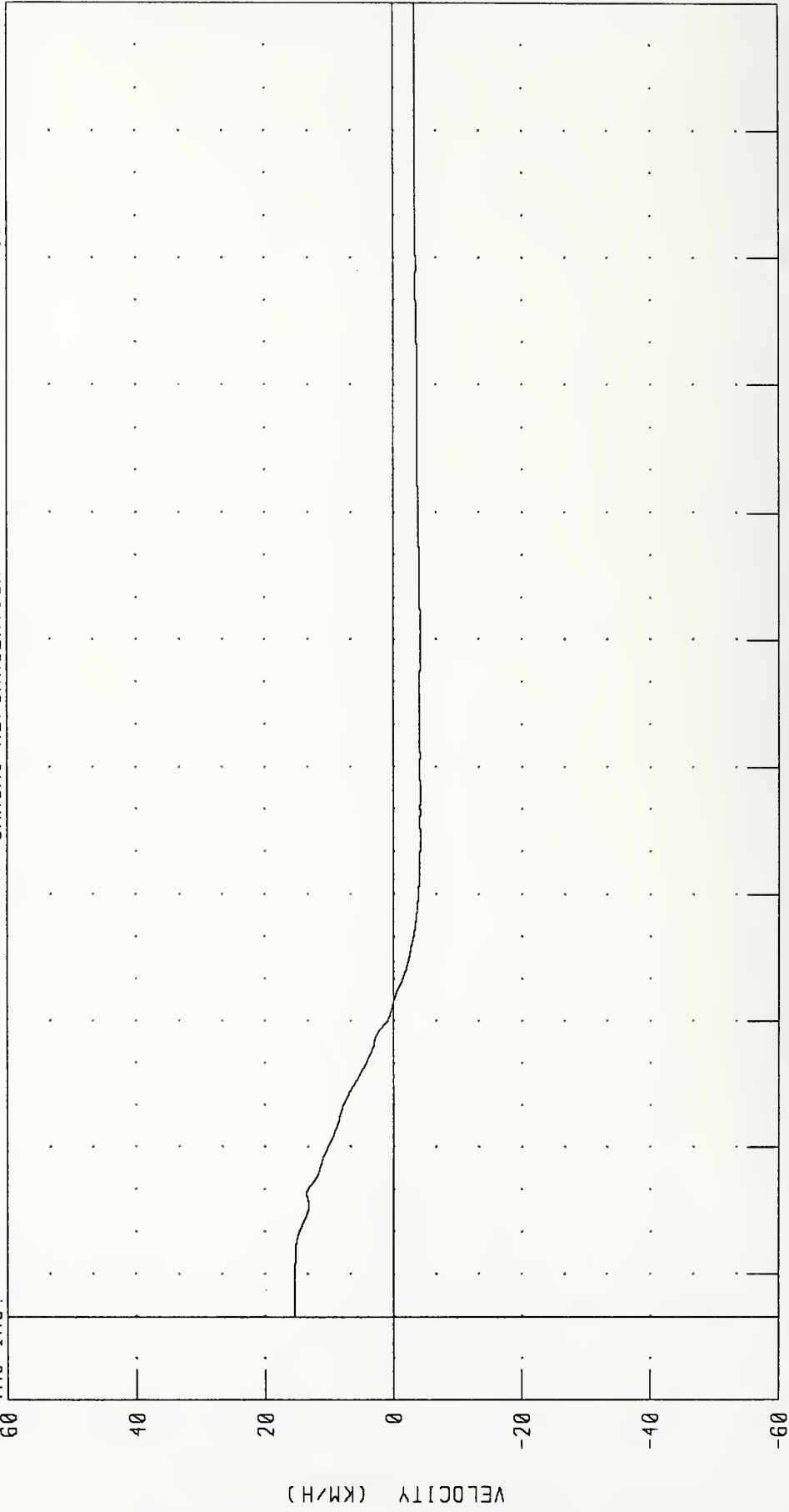
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

RIGHT FRONT SILL X-AXIS VELOCITY

CRASH3 REFORMULATION

TRC INC.

TEST NUMBER 950119



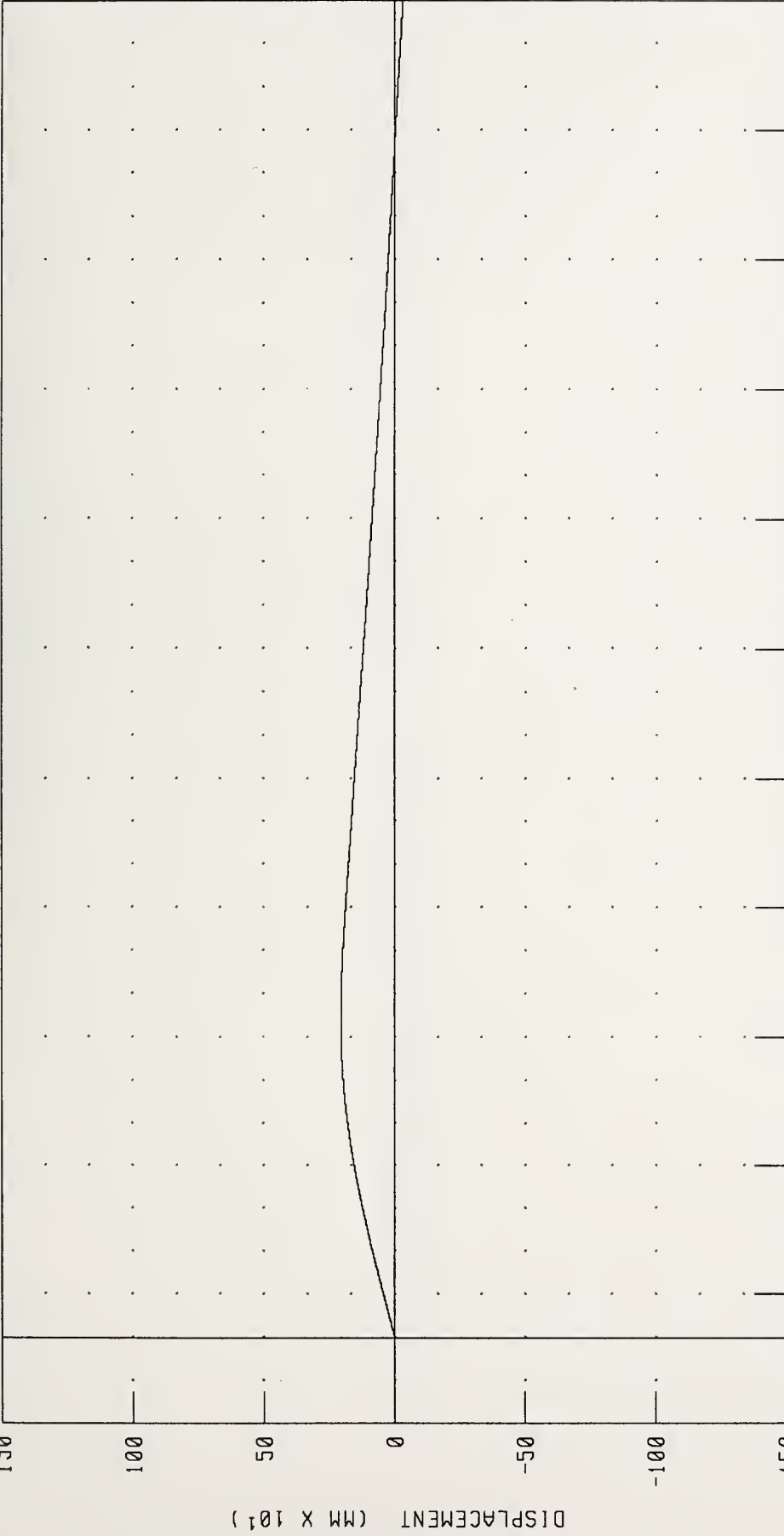
CHANNEL: RFSXV1 FILTER: CH CLASS 180
PEAK DATA: 15.40 KM/H @ 0.00 MS, -4.22 KM/H @ 112.24 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
RIGHT FRONT SILL X-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.



DISPLACEMENT (MM X 10¹)

CHANNEL RFSXD1 FILTER CH CLASS 180

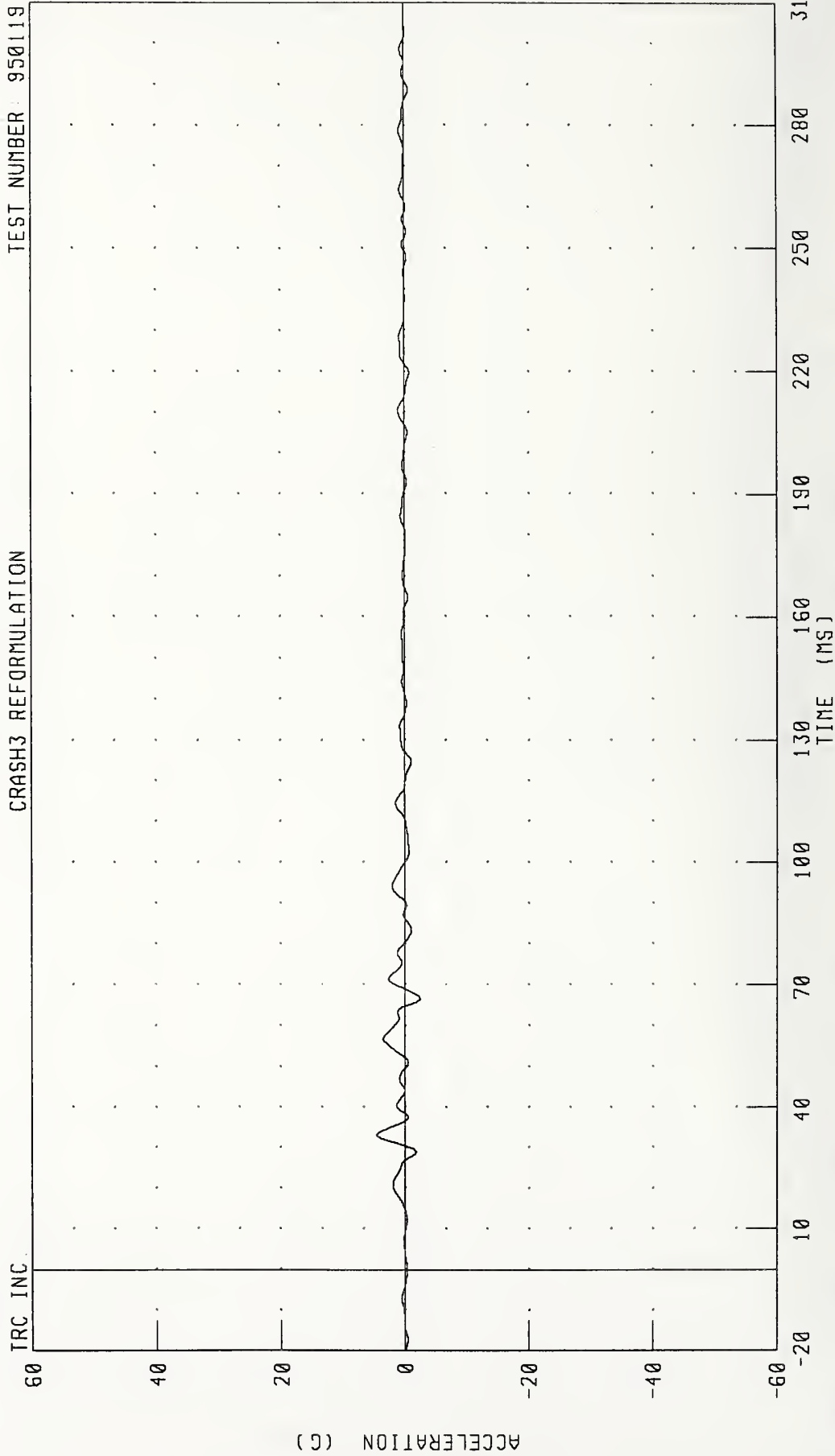
PEAK DATA: 205.28 MM @ 74.72 MS, -31.14 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

RIGHT FRONT SILL Y-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER: 950119



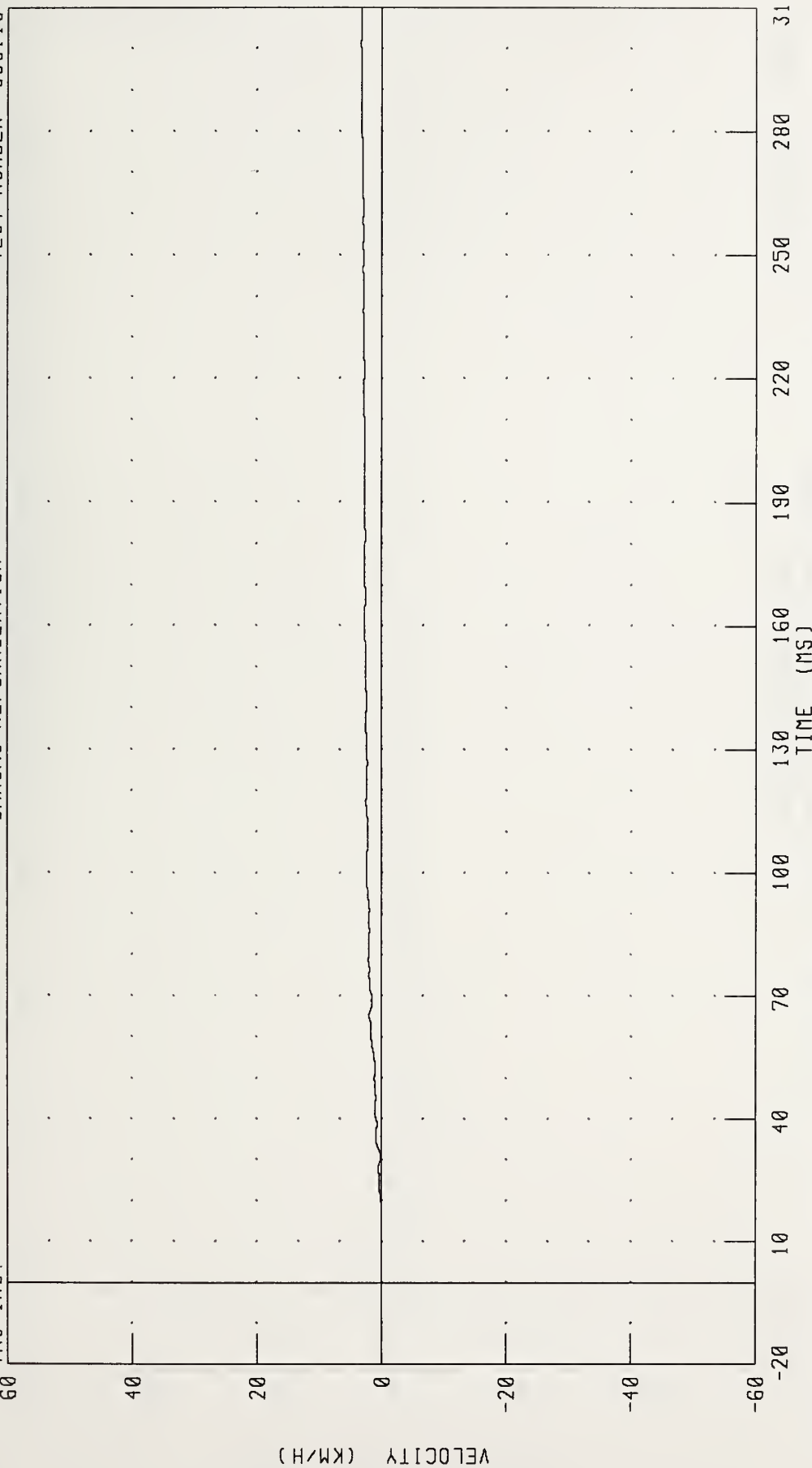
CHANNEL: RFSYG1 FILTER: CH. CLASS 60

PEAK DATA: 4.56 G @ 33.12 MS, -2.46 G @ 66.64 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
RIGHT FRONT SILL Y-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119

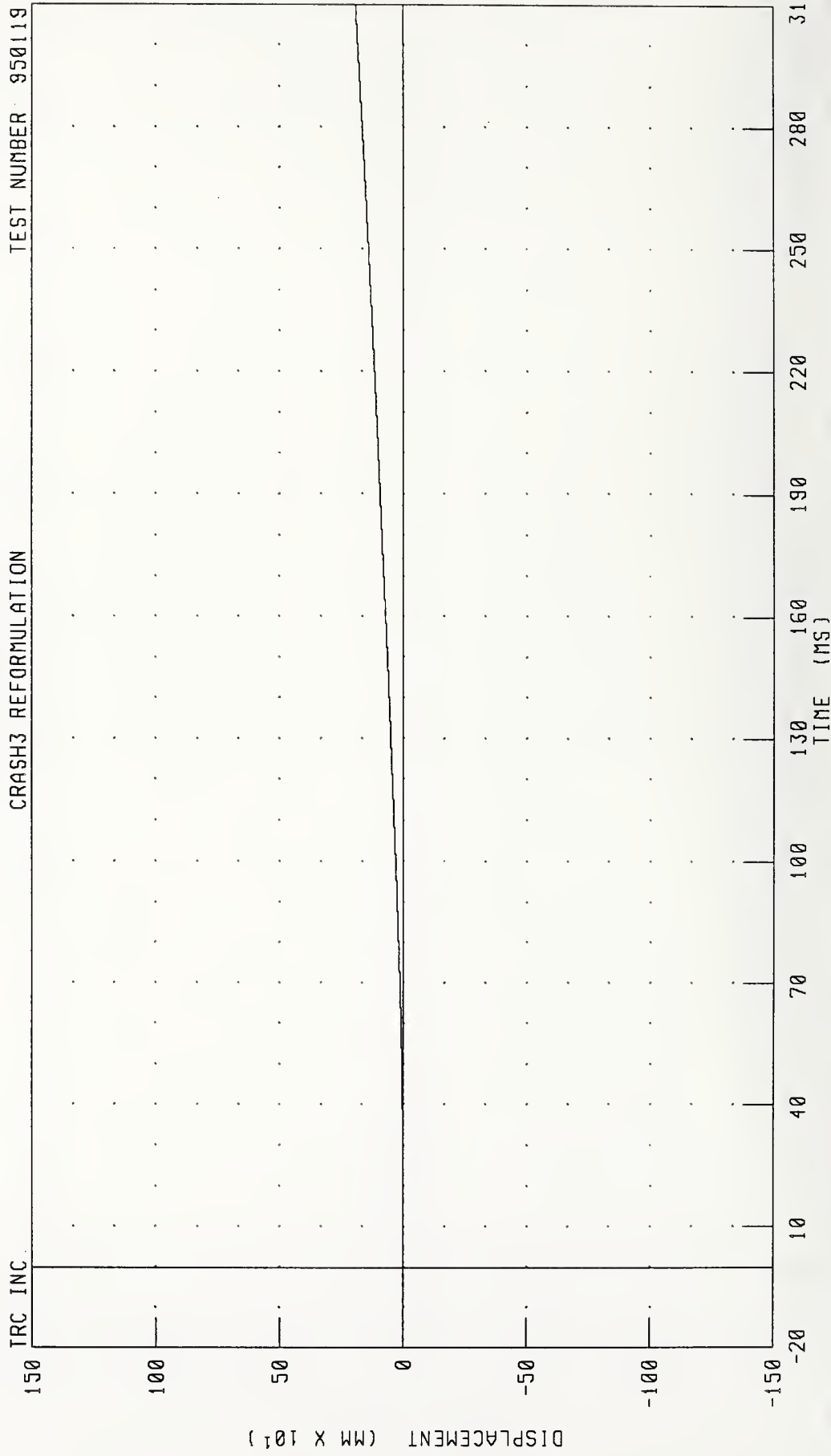
TRC INC.



CHANNEL: RFSYV1 FILTER: CH CLASS 180

PEAK DATA: 3.32 KM/H @ 301.36 MS, -0.05 KM/H @ 13.44 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
 RIGHT FRONT SILL Y-AXIS DISPLACEMENT



CHANNEL: RFSYD1 FILTER: CH CLASS 180

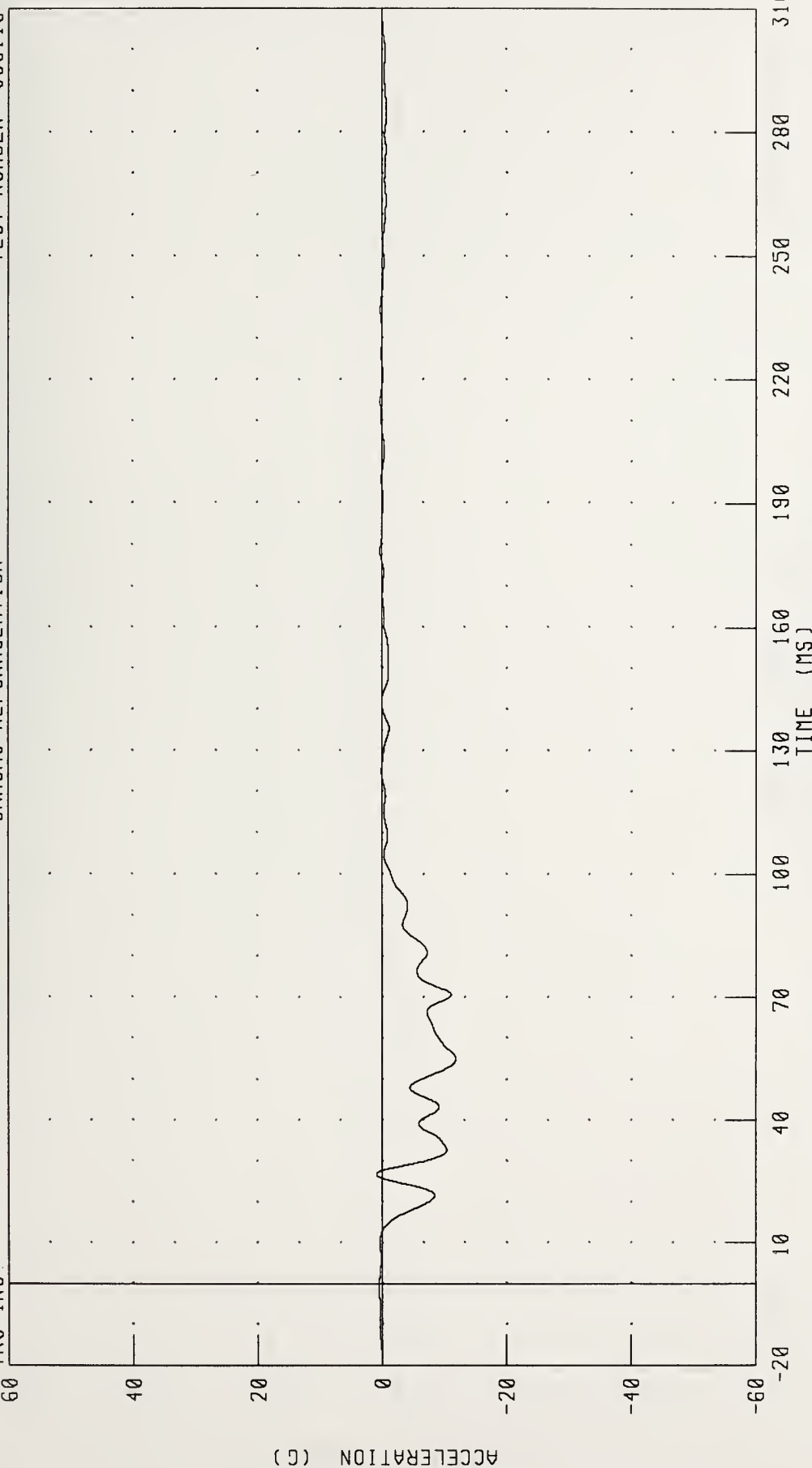
PEAK DATA: 193 18 MM @ 310 00 MS, -0.12 MM @ 18.16 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
LEFT REAR SEAT X-AXIS ACCELERATION

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL: TLRXG1 FILTER: CH. CLASS 60

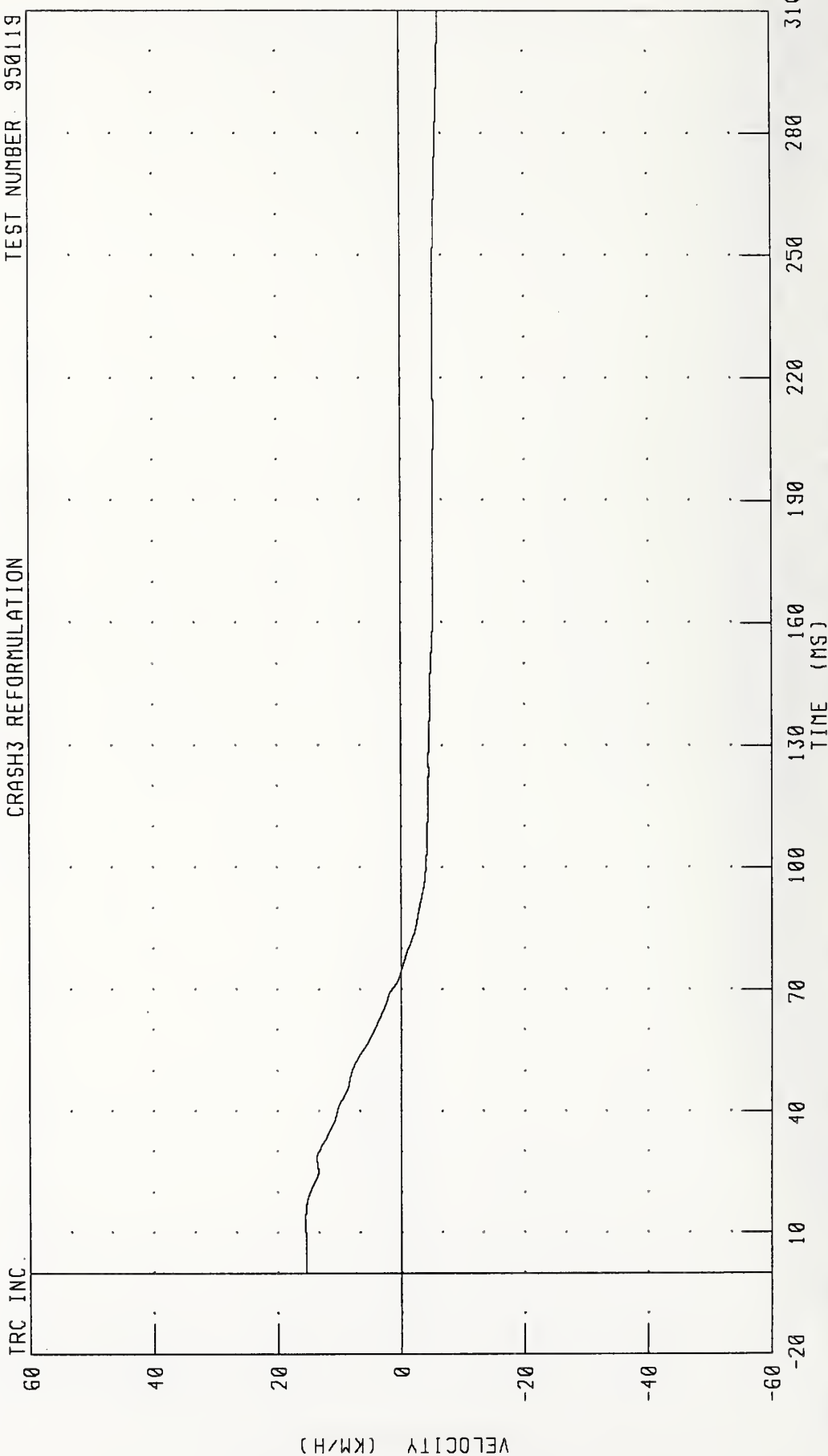
PEAK DATA 0 93 G @ 26 80 MS, -11 84 G @ 54 88 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

LEFT REAR SEAT X-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER 950119



CHANNEL: TLRXV1 FILTER: CH. CLASS 180

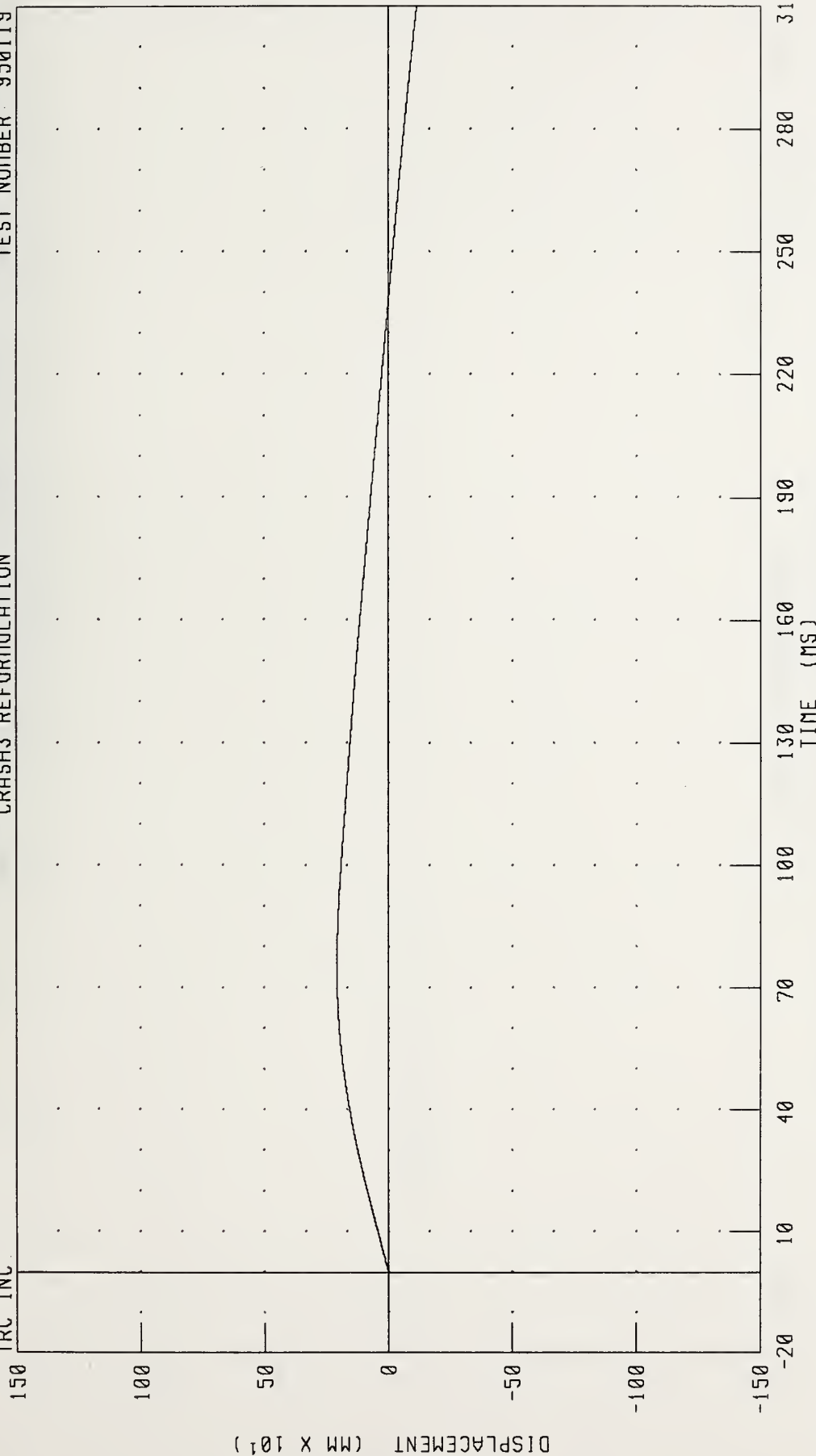
PEAK DATA: 15 53 KM/H @ 12.32 MS; -6.21 KM/H @ 309.04 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
LEFT REAR SEAT X-AXIS DISPLACEMENT

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC



CHANNEL: TLRXD1 FILTER: CH CLASS 180

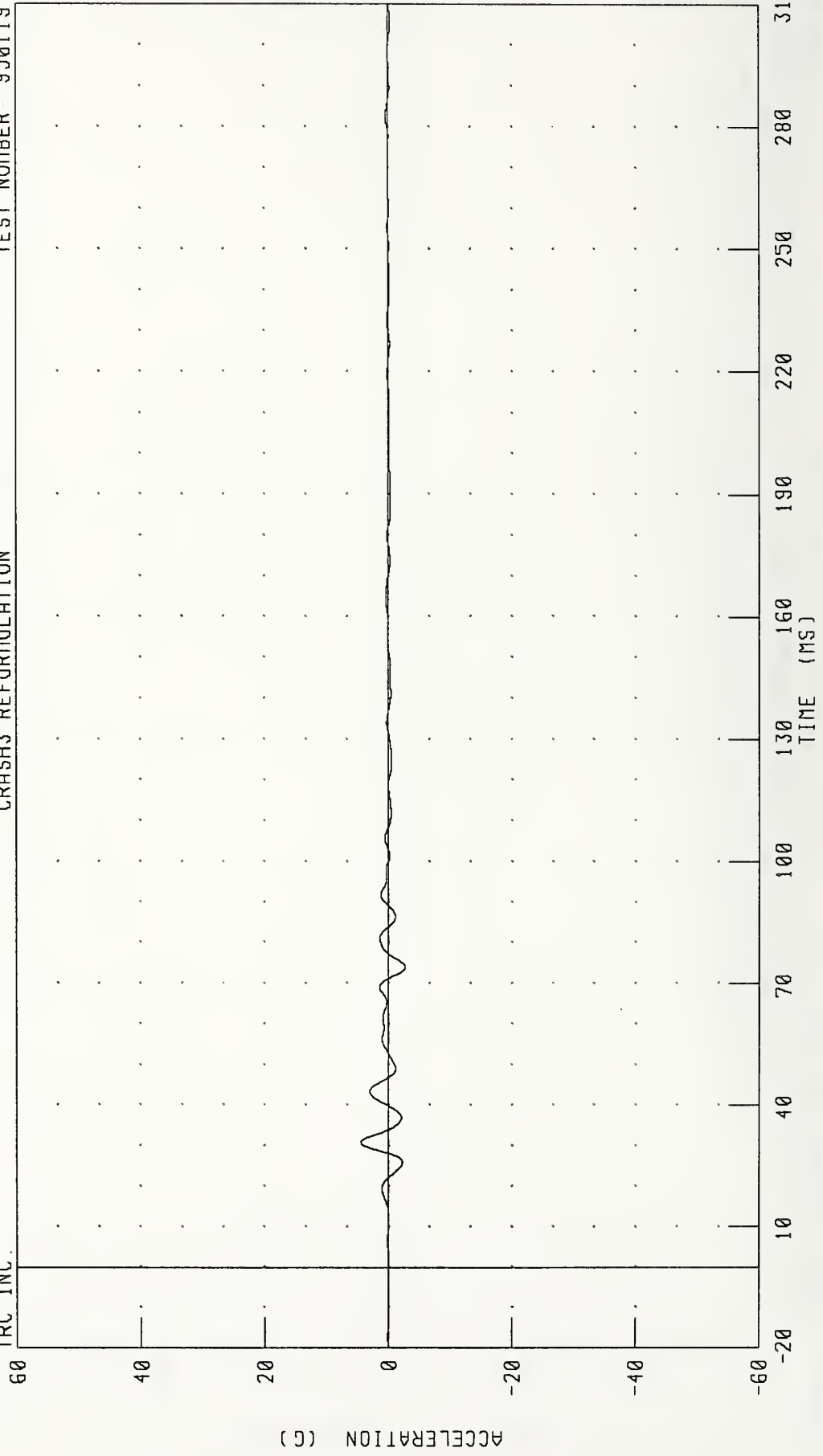
PEAK DATA: 207.82 MM @ 74.64 MS; -113.80 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
LEFT REAR SEAT Y-AXIS ACCELERATION

TEST NUMBER 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL TLRYG1 FILTER CH CLASS 60

PEAK DATA 4 46 G @ 30.88 MS; -2 69 G @ 74.00 MS

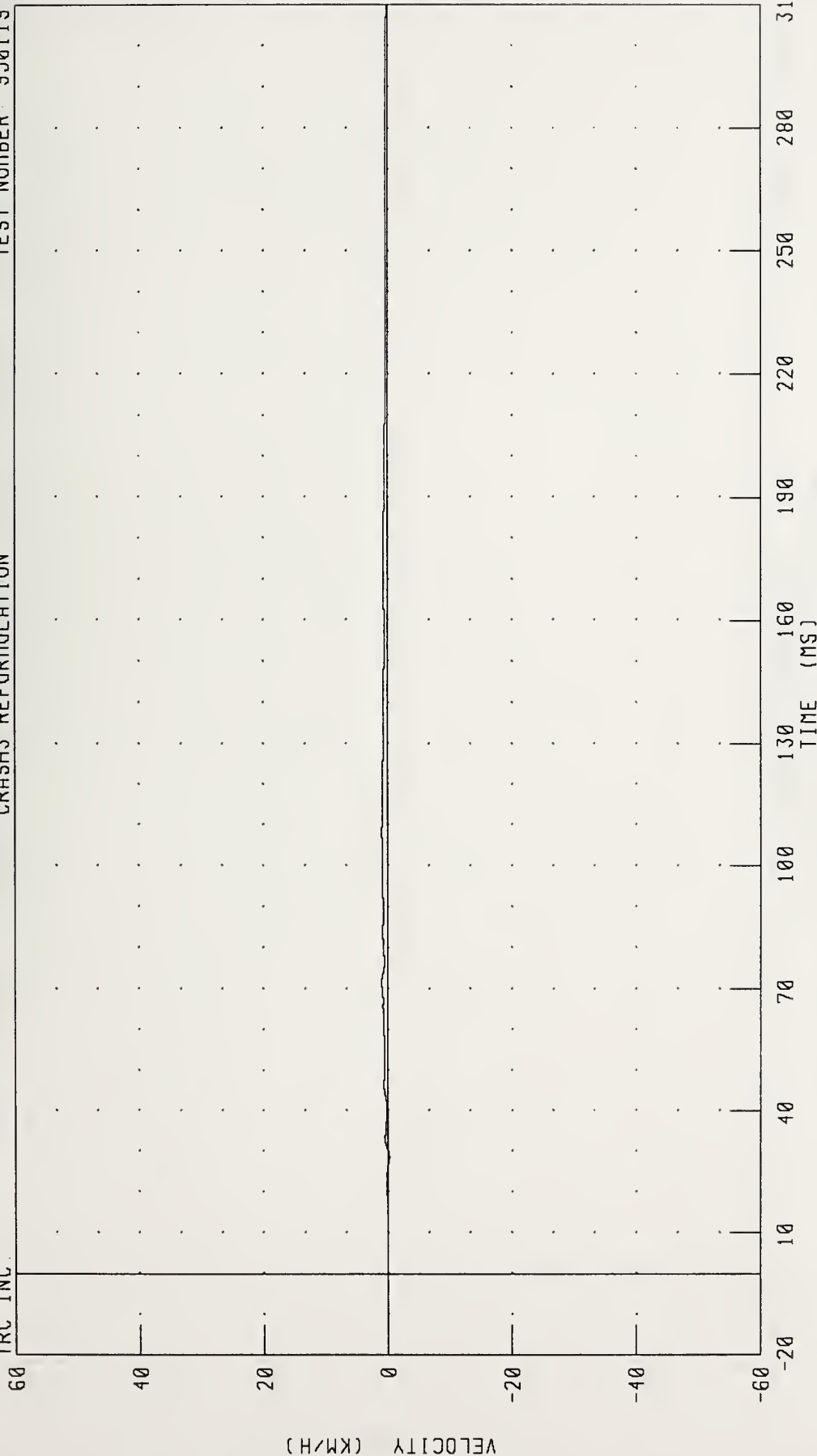
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

LEFT REAR SEAT Y-AXIS VELOCITY

TEST NUMBER 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL: TLRYV1 FILTER: CH CLASS 180

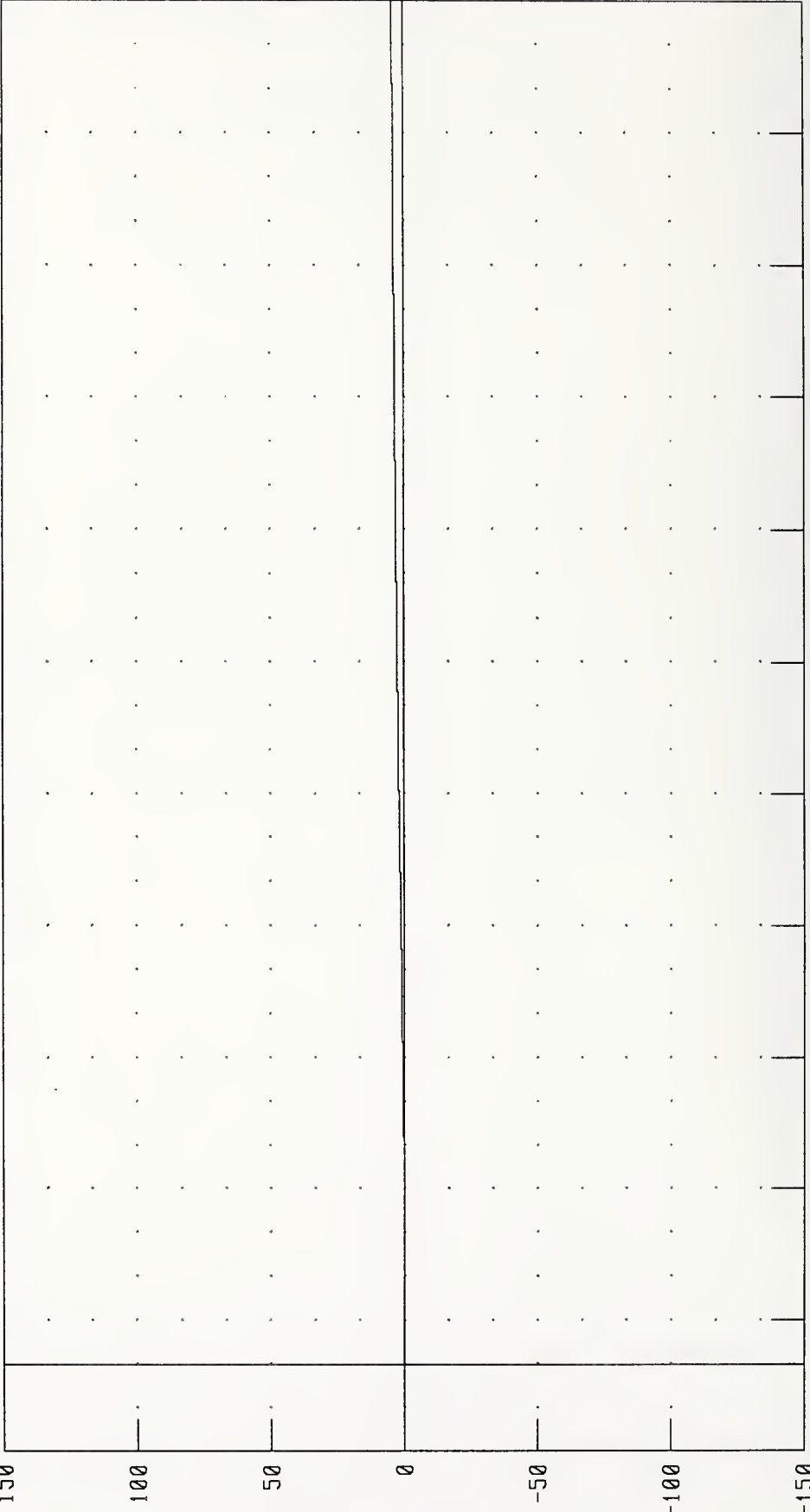
PEAK DATA: 0.99 KM/H @ 71.76 MS, -0.25 KM/H @ 28.48 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
LEFT REAR SEAT Y-AXIS DISPLACEMENT

TEST NUMBER 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL: TLRY01 FILTER: CH. CLASS 180

PEAK DATA: 42.11 MM @ 310.00 MS; -0.01 MM @ 5.76 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
RIGHT REAR SEAT X-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC

60

40

20

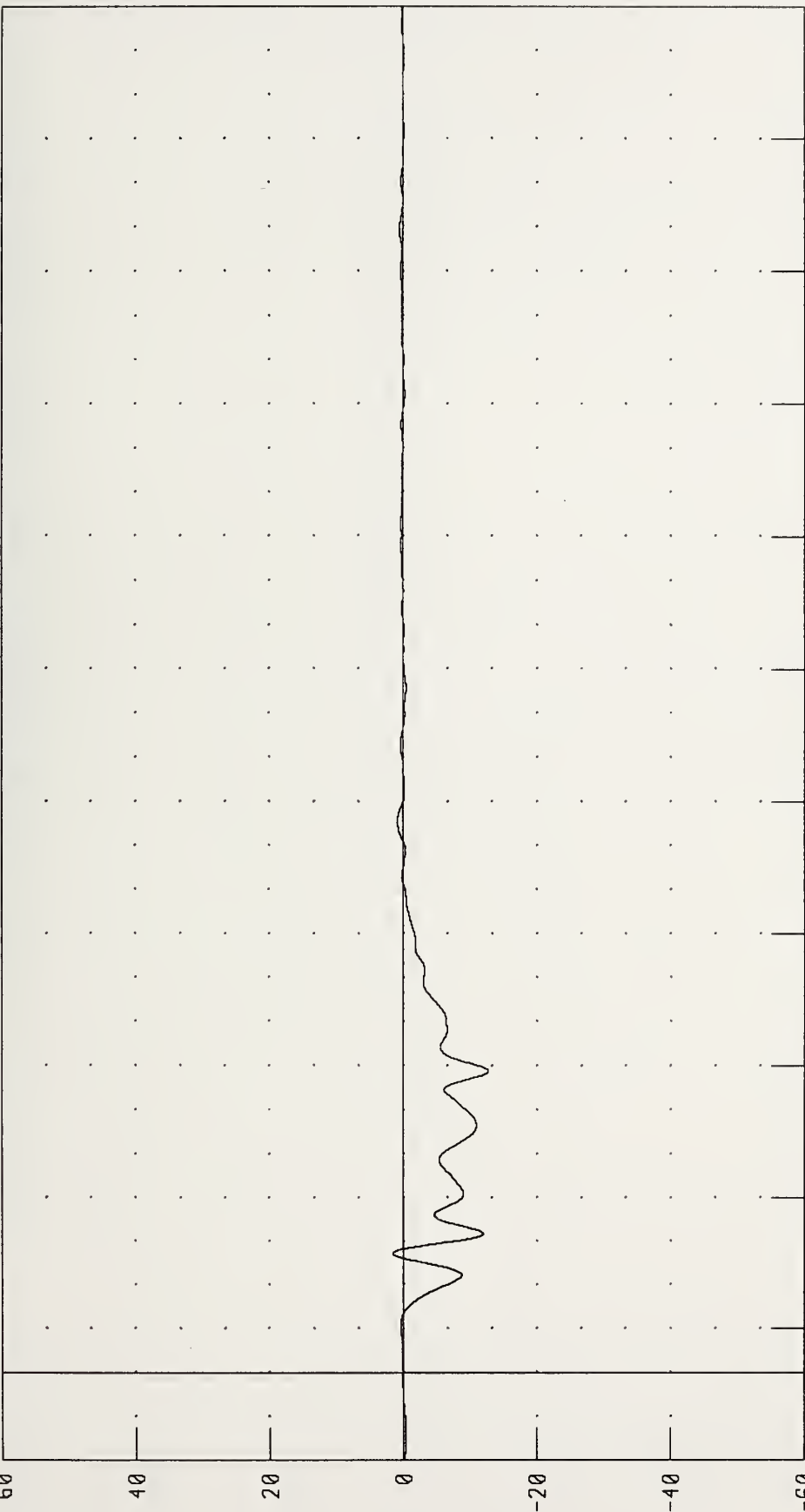
0

-20

-40

-60

ACCELERATION (G)



TIME (MS)

100

70

40

10

-20

-40

-60

PEAK DATA 1.60 G @ 27.20 MS, -12.75 G @ 68.80 MS

CHANNEL: TRRXG1 FILTER: CH CLASS 60

280

250

220

190

160

130

100

70

40

10

-20

-40

-60

310

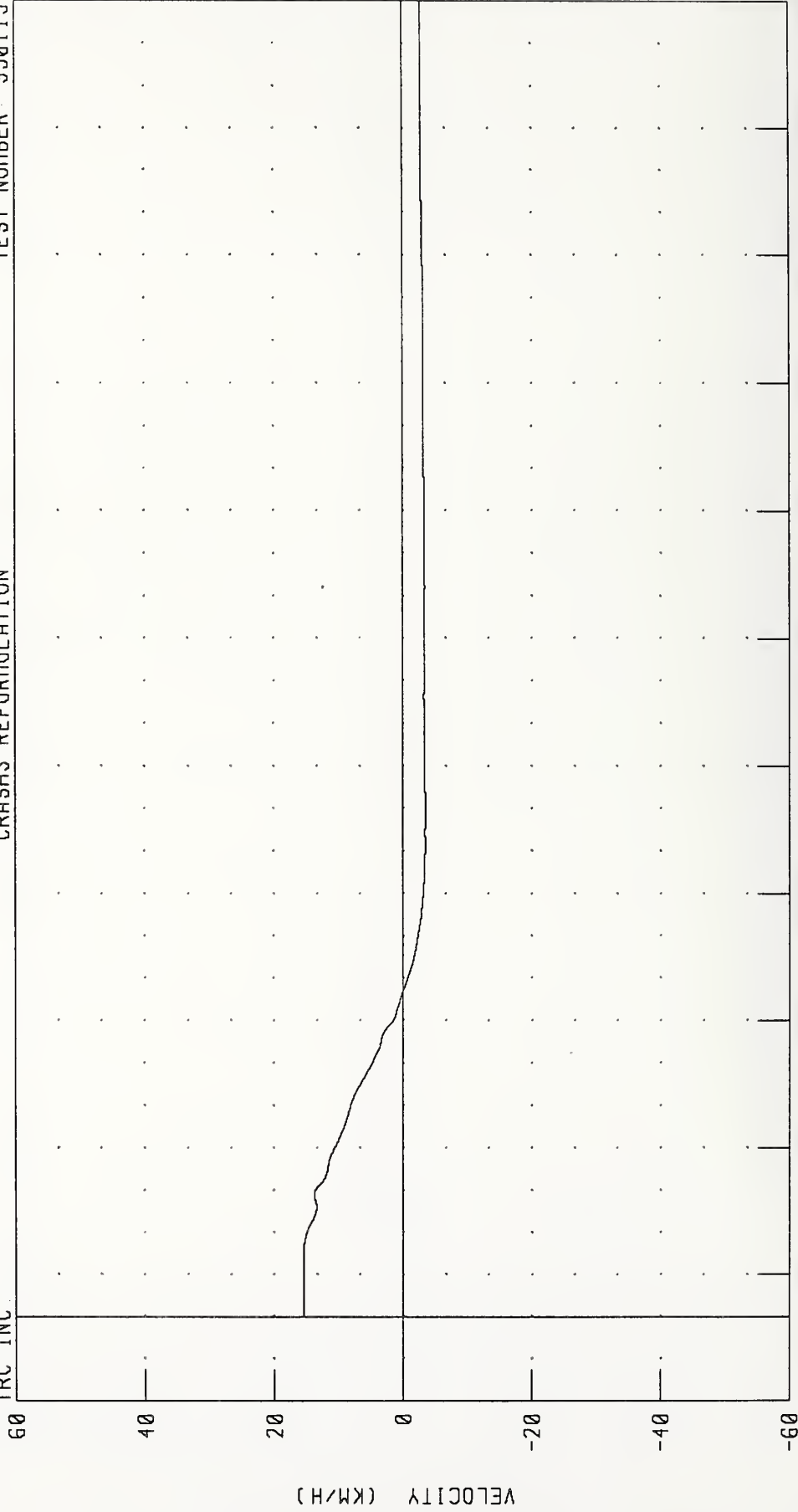
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

RIGHT REAR SEAT X-AXIS VELOCITY

CRASH3 REFORMULATION

TRC INC

TEST NUMBER 950119



CHANNEL TRRXV1 FILTER CH CLASS 180

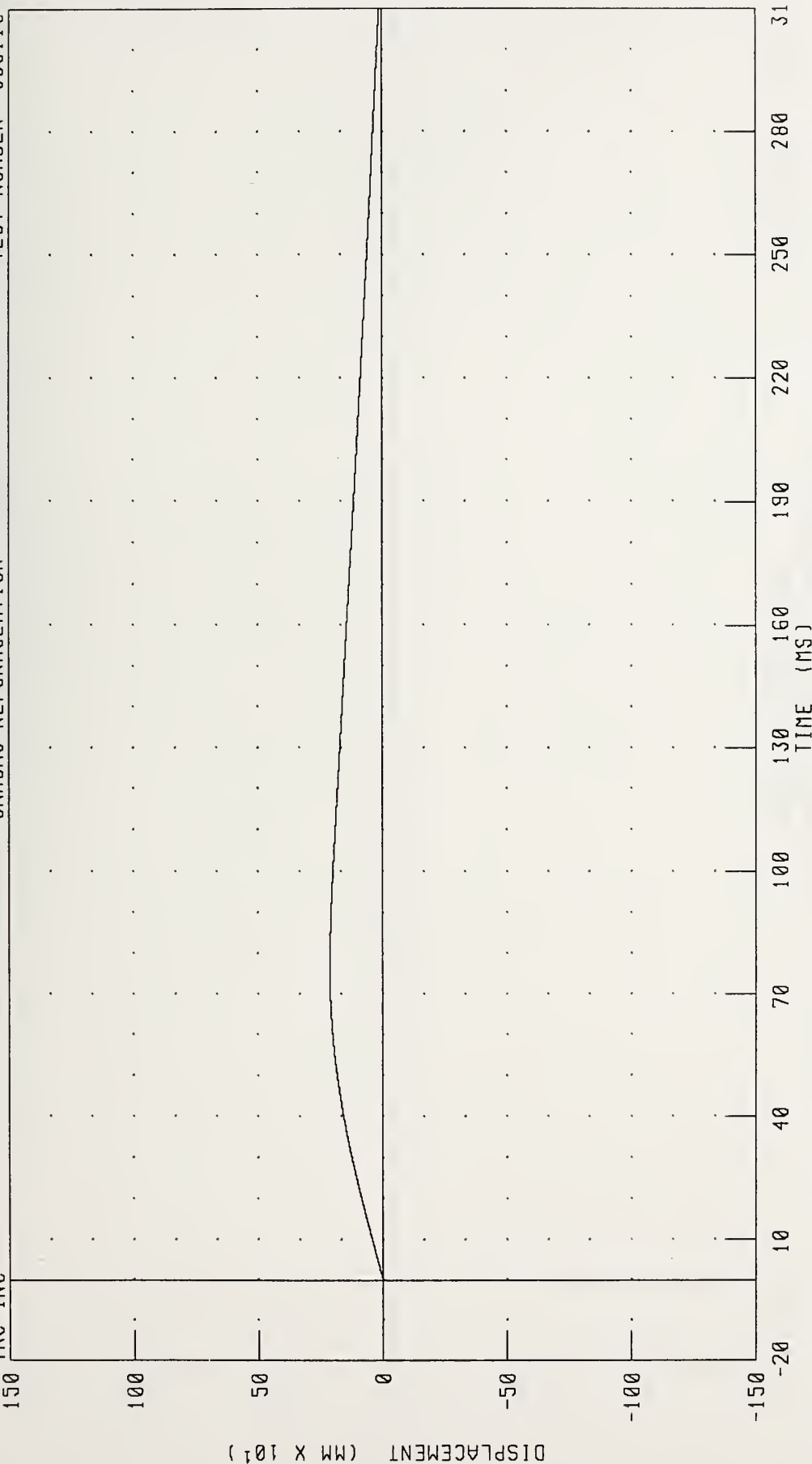
PEAK DATA: 15.49 KM/H @ 14.16 MS, -3.51 KM/H @ 121.12 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5
RIGHT REAR SEAT X-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TRC INC

TEST NUMBER: 950119



CHANNEL: TRRX01 FILTER: CH CLASS 180

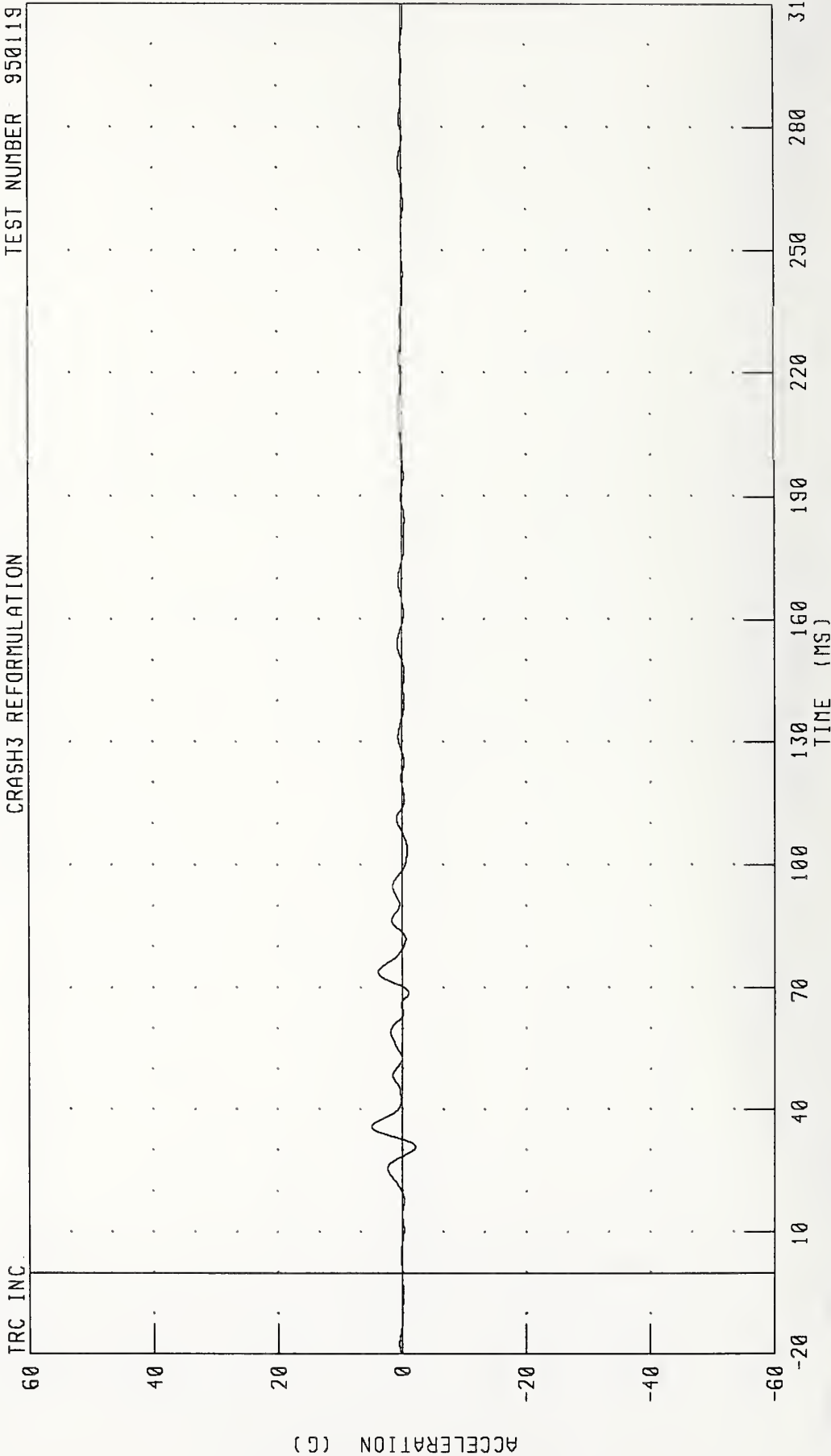
TIME (MS)

PEAK DATA: 211 92 MM @ 76 96 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

RIGHT REAR SEAT Y-AXIS ACCELERATION

CRASH3 REFORMULATION TEST NUMBER 950119



CHANNEL: TTRYG1 FILTER: CH CLASS 60

PEAK DATA: 4 89 G @ 35.84 MS, -2.19 G @ 30.88 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

RIGHT REAR SEAT Y-AXIS VELOCITY

CRASH3 REFORMULATION

TRC INC.

60

40

20

0

-20

-40

-60

VELOCITY (KM/H)

10

40

70

100

130

160

190

220

250

280

310

TIME (MS)

PEAK DATA 2 75 KM/H @ 292.32 MS, -0.05 KM/H @ 19 12 MS

CHANNEL: TRRYV1 FILTER: CH. CLASS 180

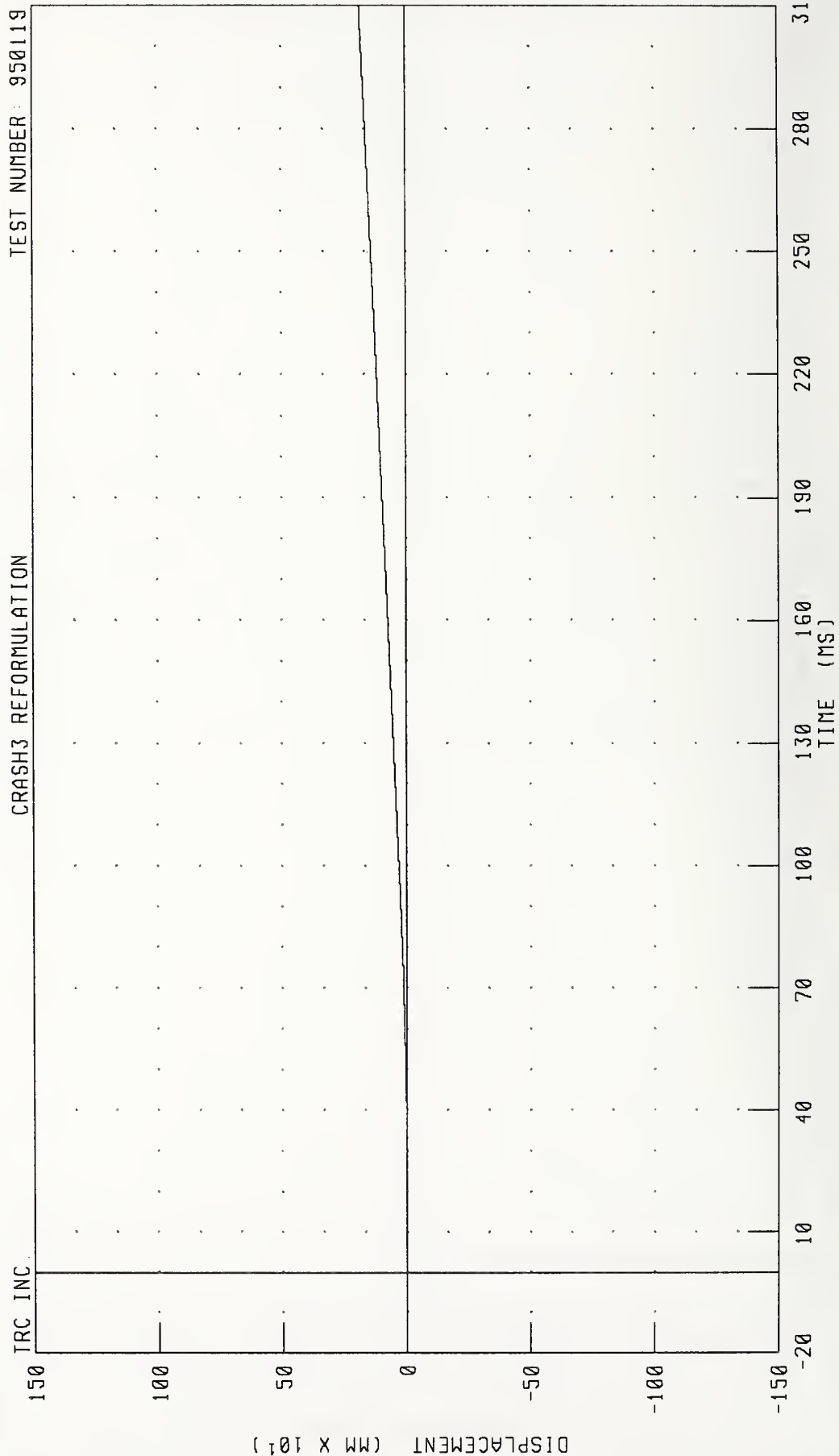
TEST NUMBER 950119

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 2 OF 5

RIGHT REAR SEAT Y-AXIS DISPLACEMENT

TEST NUMBER: 950119

CRASH3 REFORMULATION



CHANNEL: TRRY01 FILTER: CH. CLASS 180

PEAK DATA: 184 58 MM @ 310 00 MS; -0.01 MM @ 22.40 MS

Data Plots

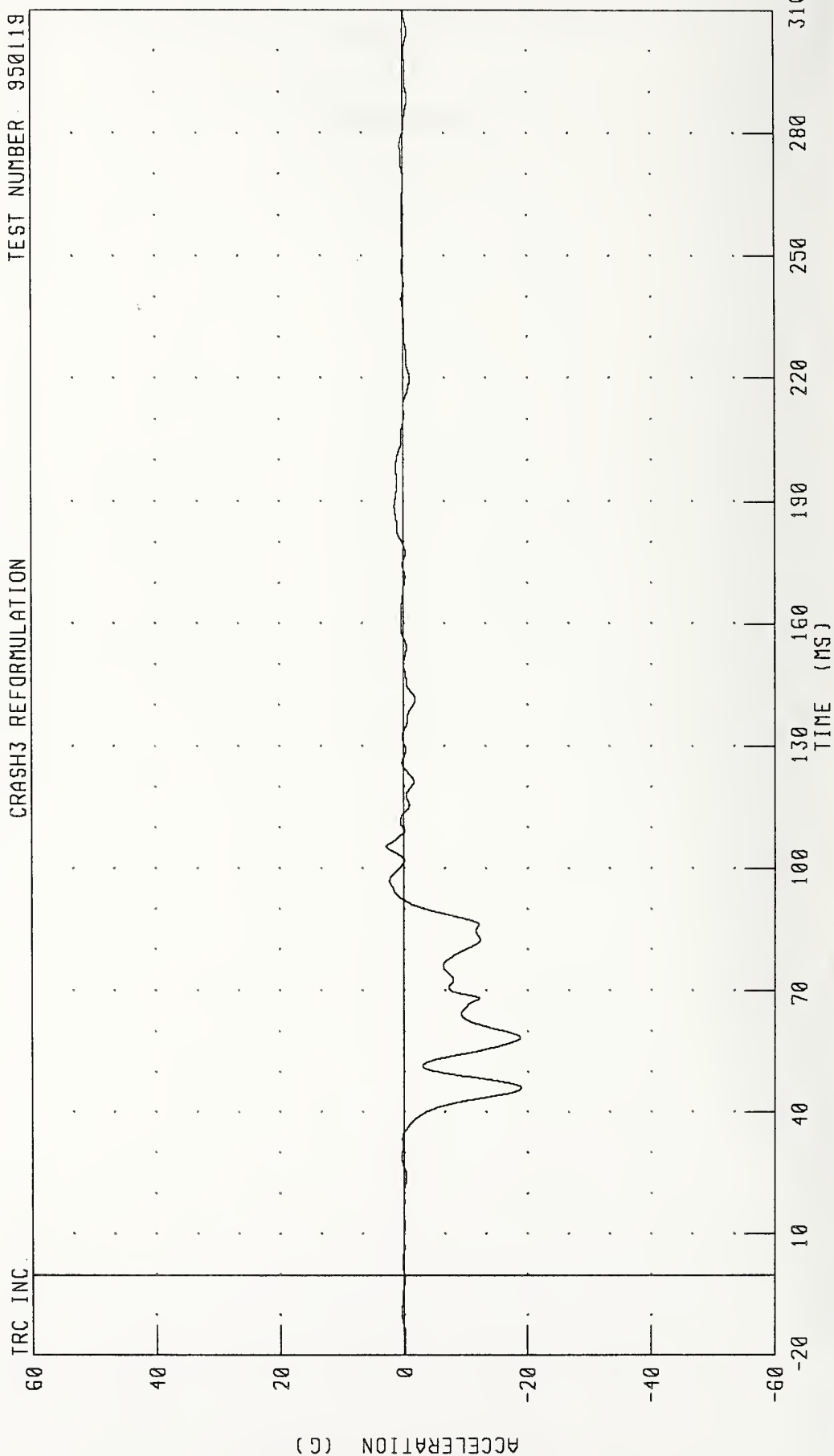
Test No. 950119-3

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5

VEHICLE CG X-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119



CHANNEL: VCGXG1 FILTER: CH CLASS 60

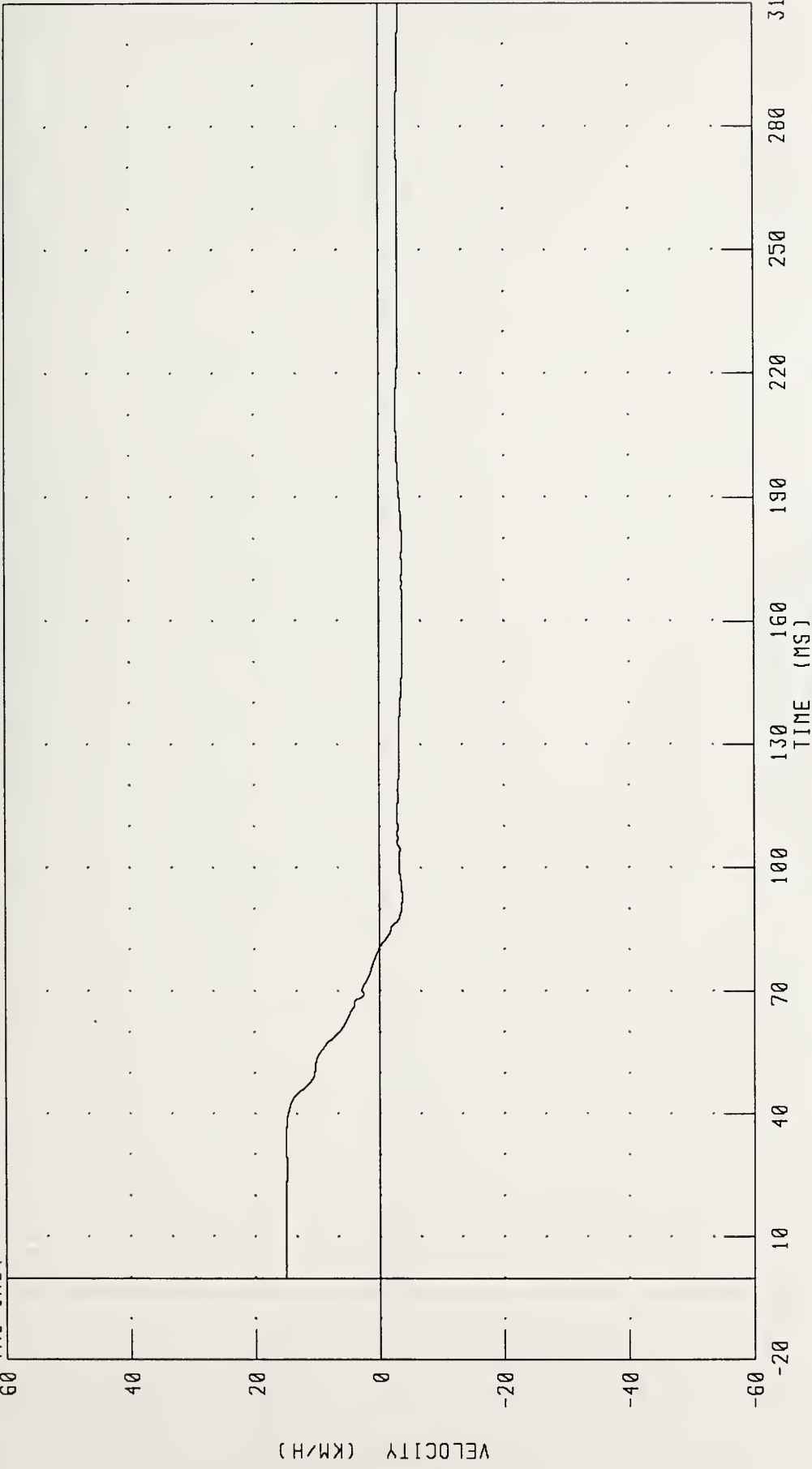
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5

VEHICLE CG X-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER 950119

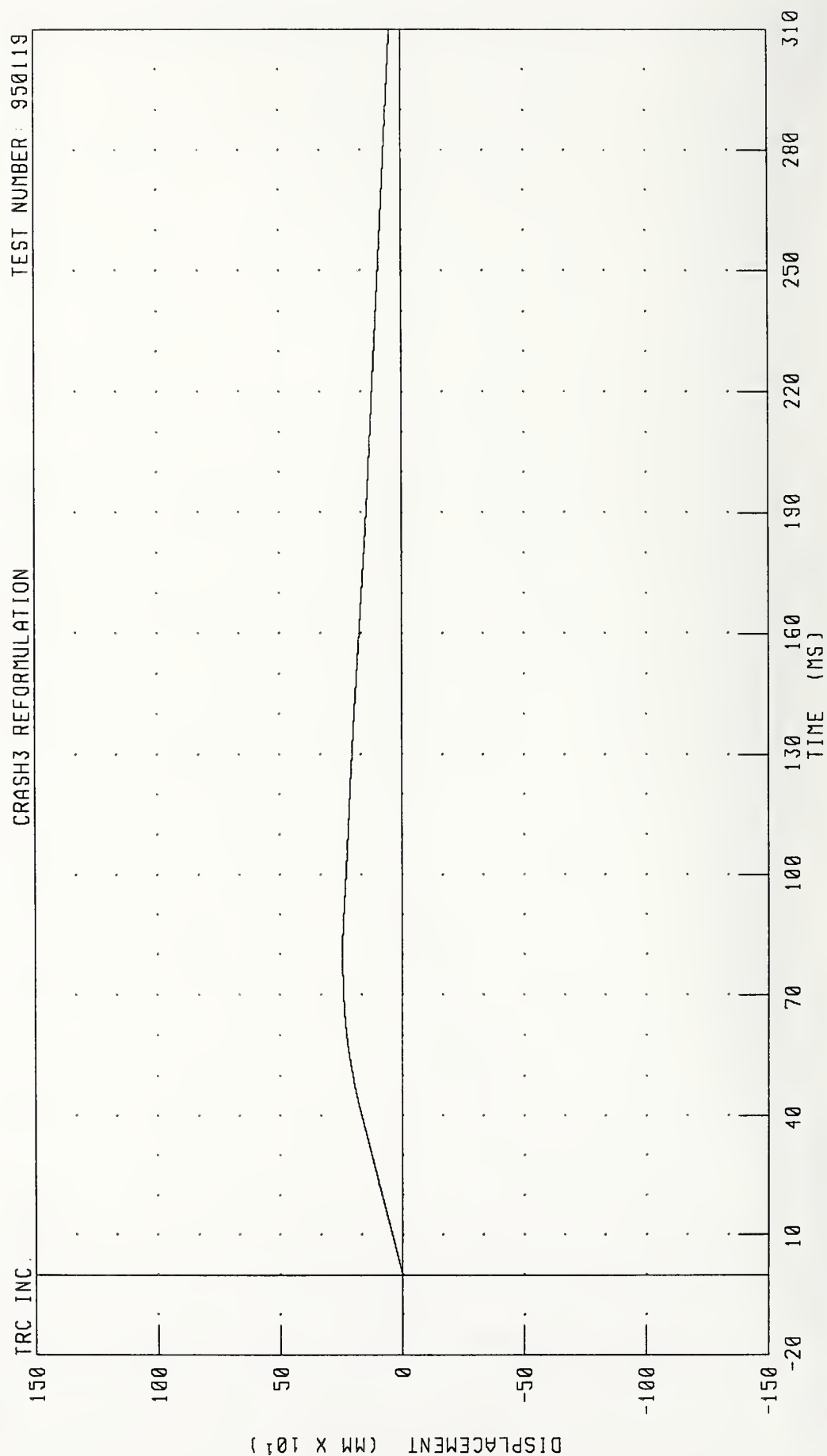
TRC INC.



CHANNEL: VCGXV1 FILTER: CH. CLASS 180

PEAK DATA: 15.05 KM/H @ 10.32 MS; -3.75 KM/H @ 156.64 MS

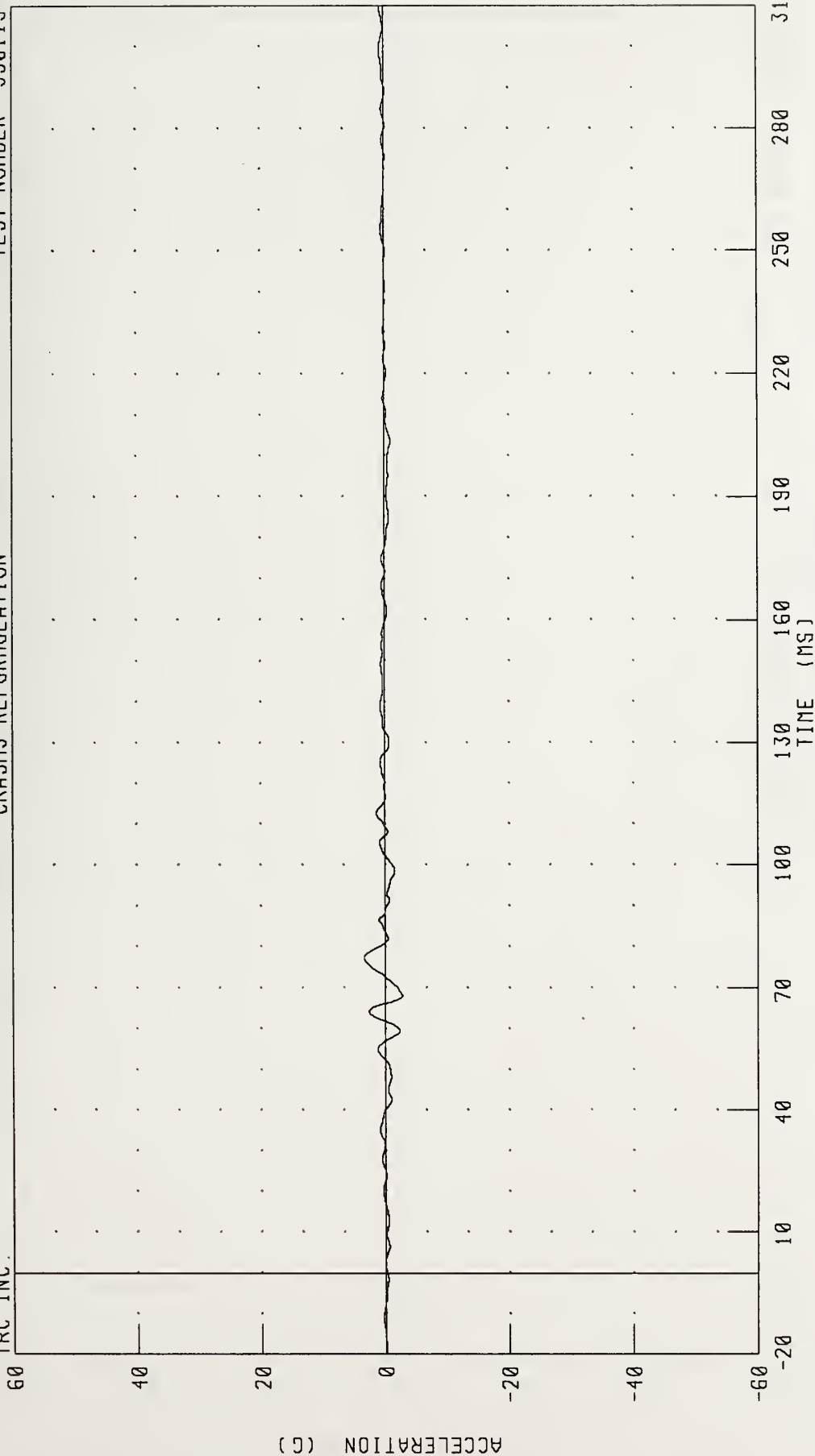
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
 VEHICLE CG X-AXIS DISPLACEMENT



1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
VEHICLE CG Y-AXIS ACCELERATION

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



CHANNEL: VCGY61 FILTER: CH CLASS 60

PEAK DATA: 3.42 G @ 77.36 MS, -2.80 G @ 68.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5

VEHICLE CG Y-AXIS VELOCITY

TEST NUMBER 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL: VCGYV1 FILTER: CH CLASS 180

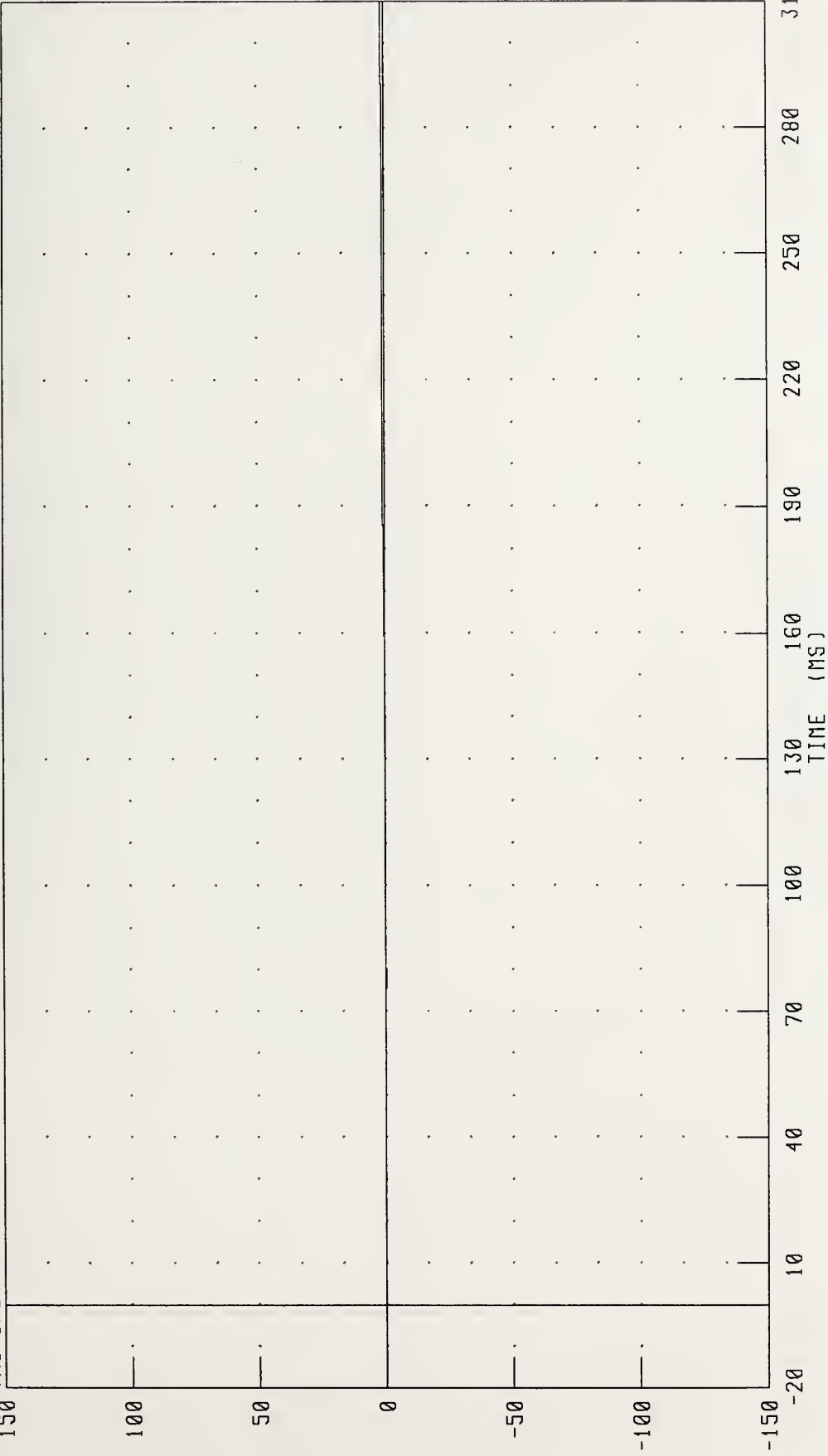
PEAK DATA: 0 65 KM/H @ 175 92 MS, -0.46 KM/H @ 73.76 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
 VEHICLE CG Y-AXIS DISPLACEMENT
 CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.

DISPLACEMENT (MM X 10¹)



CHANNEL VCGYD1 FILTER CH CLASS 180

PEAK DATA 12 83 MM @ 310.00 MS, -2.03 MM @ 77 84 MS

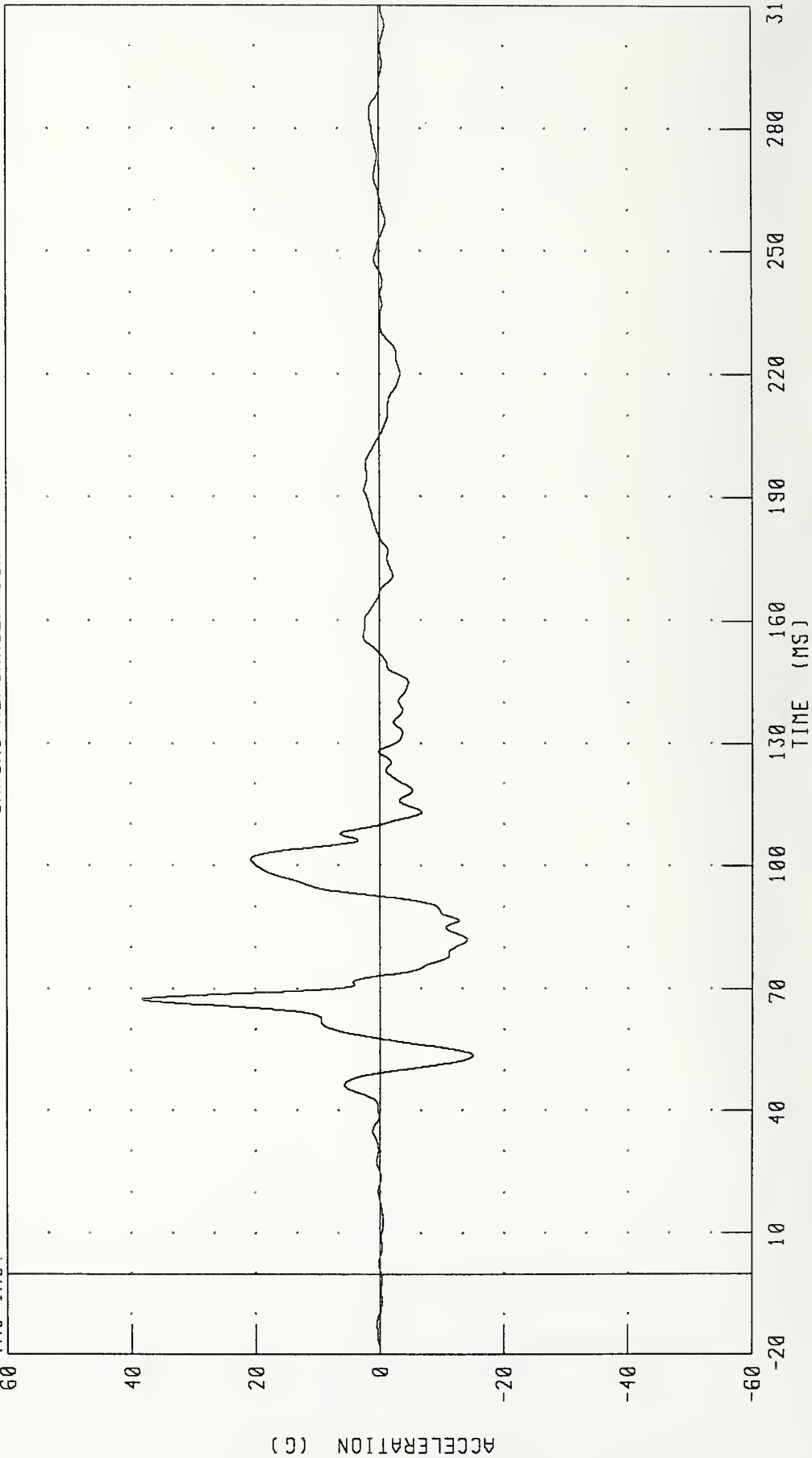
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5

VEHICLE CG Z-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER: 950119

TRC INC.



CHANNEL: VCGZG1 FILTER: CH. CLASS 60

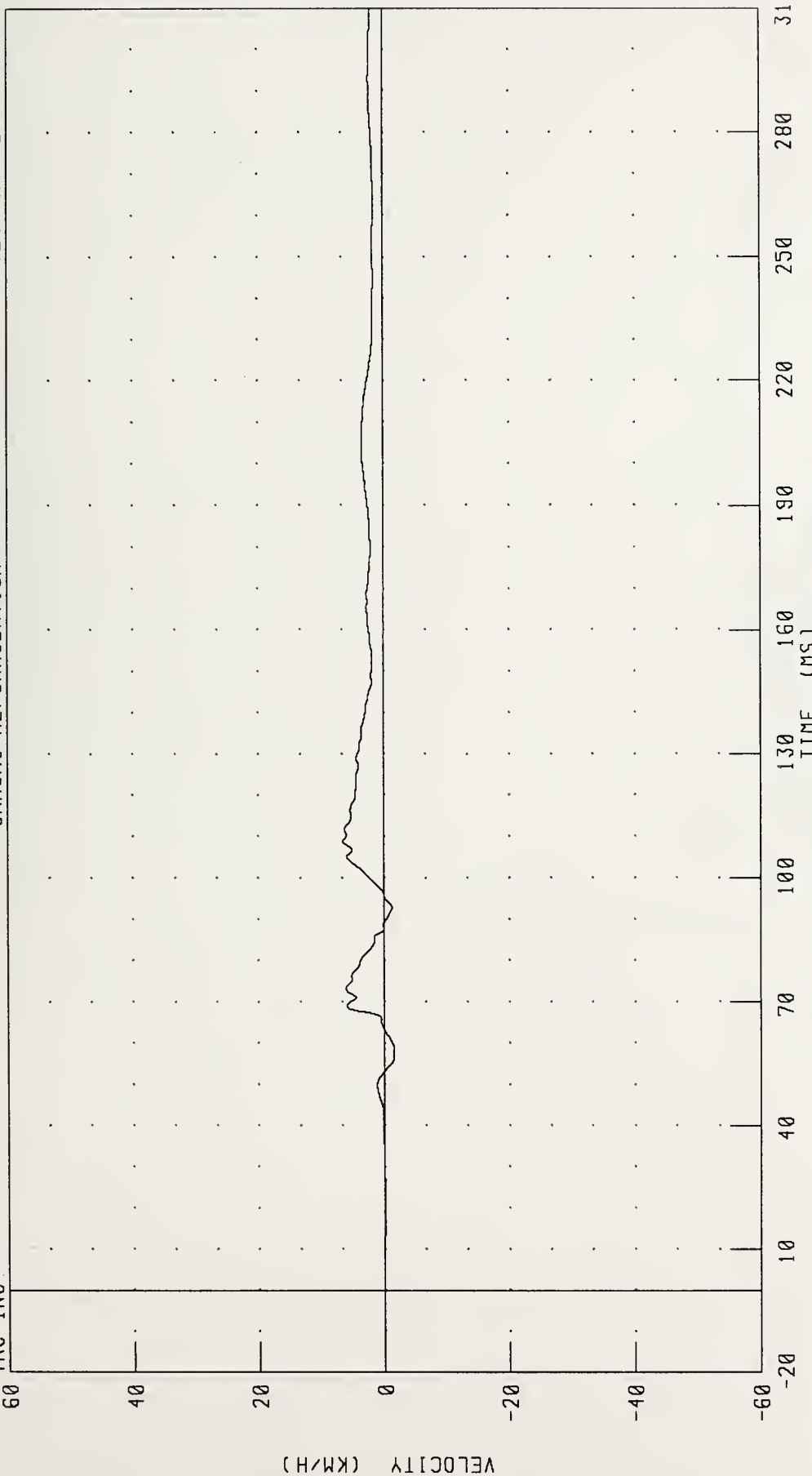
PEAK DATA: 38.29 G @ 67.44 MS, -14.98 G @ 53.60 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
VEHICLE CG Z-AXIS VELOCITY

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC

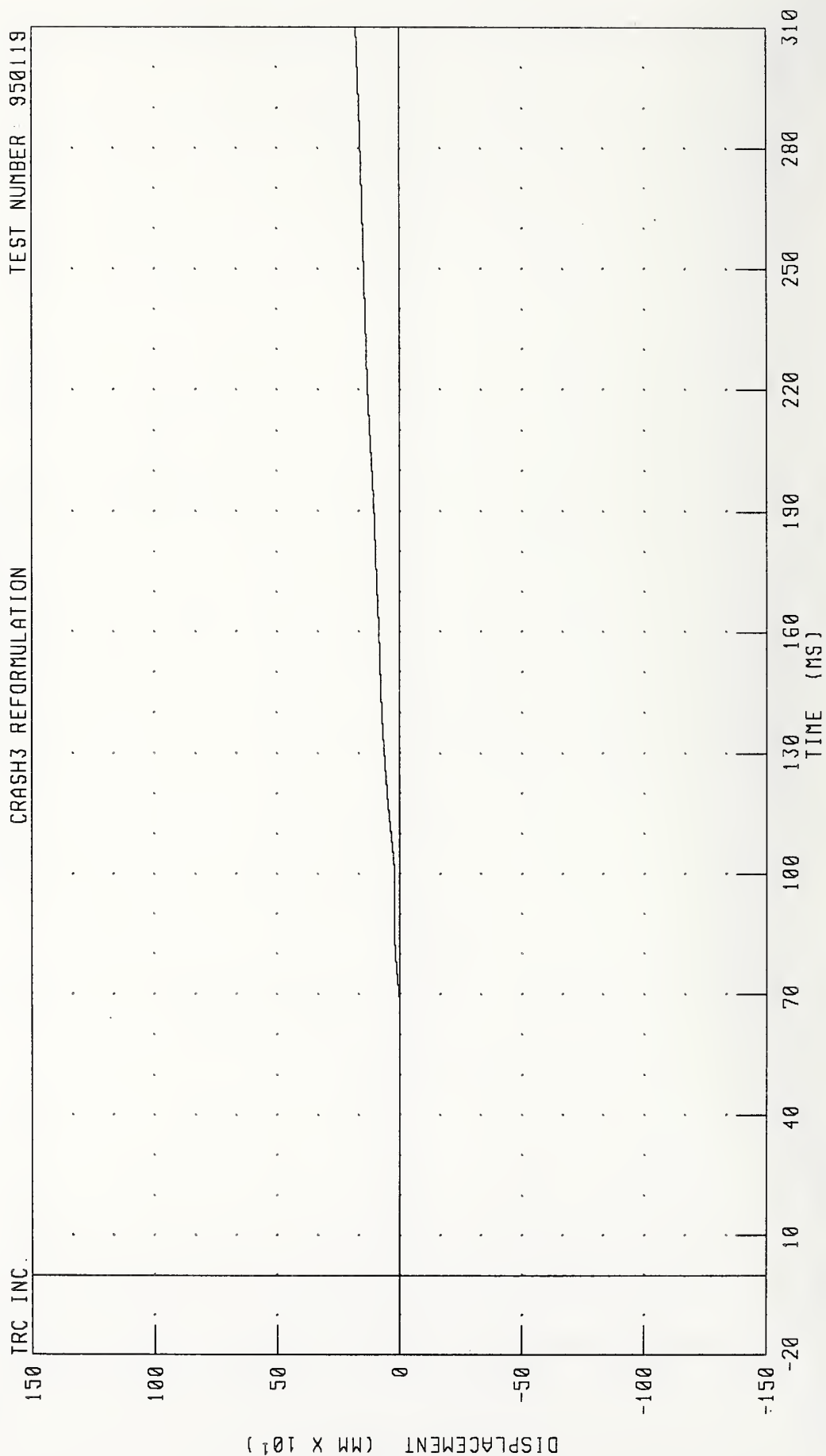


CHANNEL: VCGZV1 FILTER: CH CLASS 180

PEAK DATA: 6 60 KM/H @ 108 80 MS, -1 59 KM/H @ 58 72 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
 VEHICLE CG Z-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER: 950119



CHANNEL: VCGZD1 FILTER: CH. CLASS 180

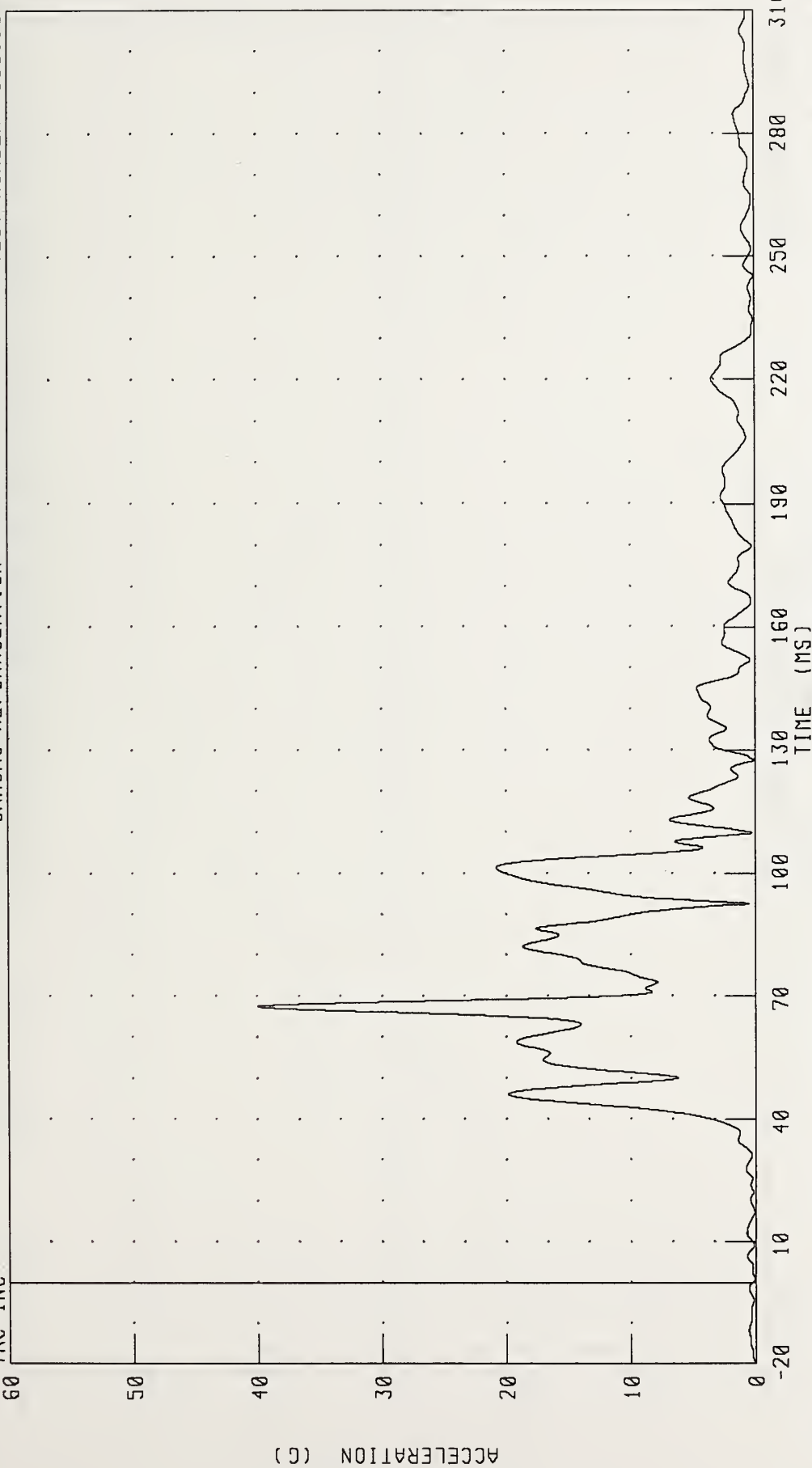
PEAK DATA: 177.39 MM @ 310.00 MS, -1.14 MM @ 63.36 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
VEHICLE CG RESULTANT ACCELERATION

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC



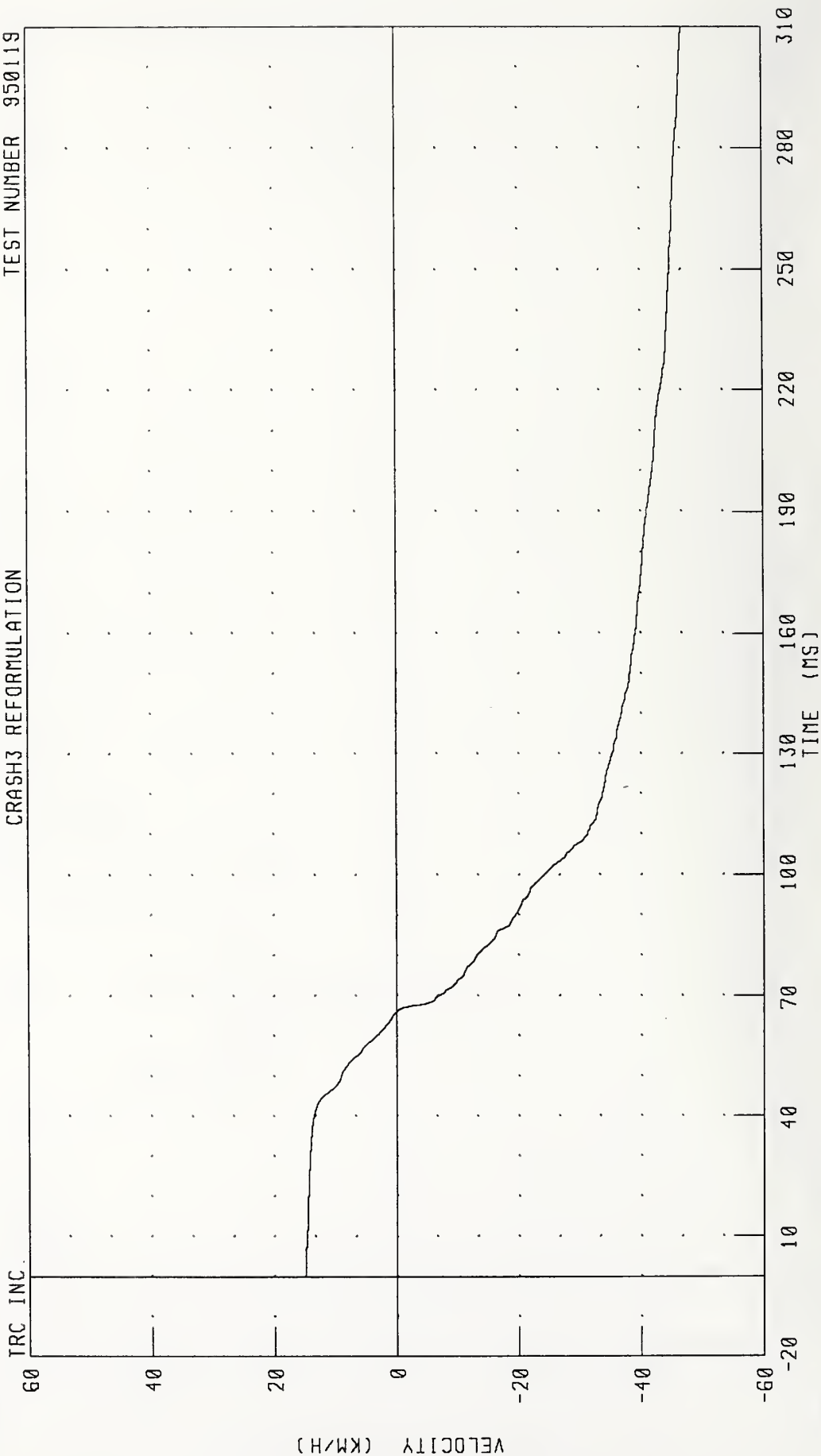
CHANNEL: VCGRG1 FILTER: CH. CLASS 60

PEAK DATA: 40.02 G @ 67.44 MS; 0.08 G @ 245.20 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5

VEHICLE CG RESULTANT VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119



CHANNEL: VCGRV1 FILTER: CH CLASS 180

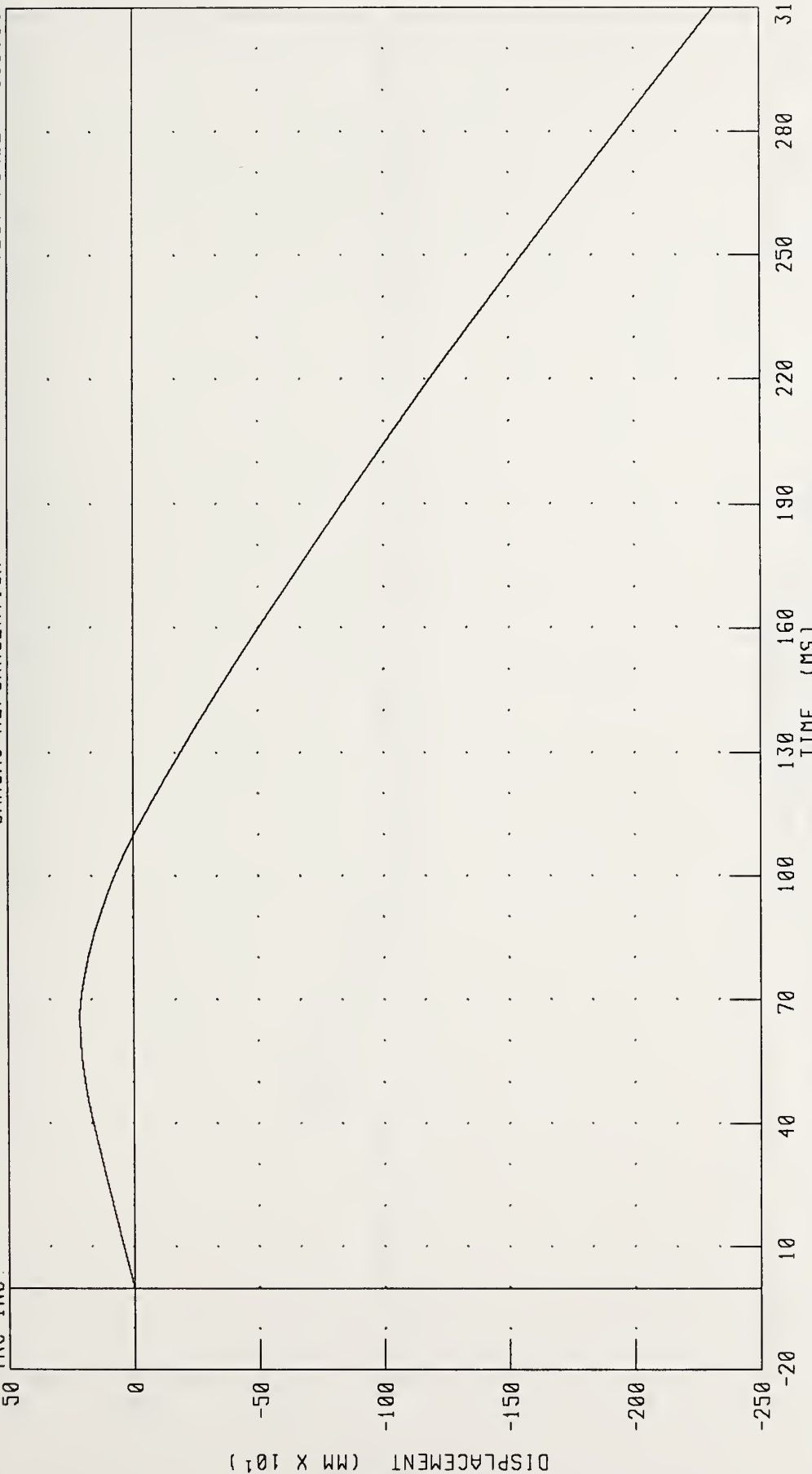
PEAK DATA: 15.00 KM/H @ 0.00 MS, -46.89 KM/H @ 310.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5 VEHICLE CG RESULTANT DISPLACEMENT

CRASH3 REFORMULATION

TEST NUMBER: 950119

TRC INC.



TIME (MS)

CHANNEL: VCGRD1 FILTER: CH. CLASS 180 PEAK DATA: 213 60 MM @ 66.16 MS, -2316 19 MM @ 310.00 MS

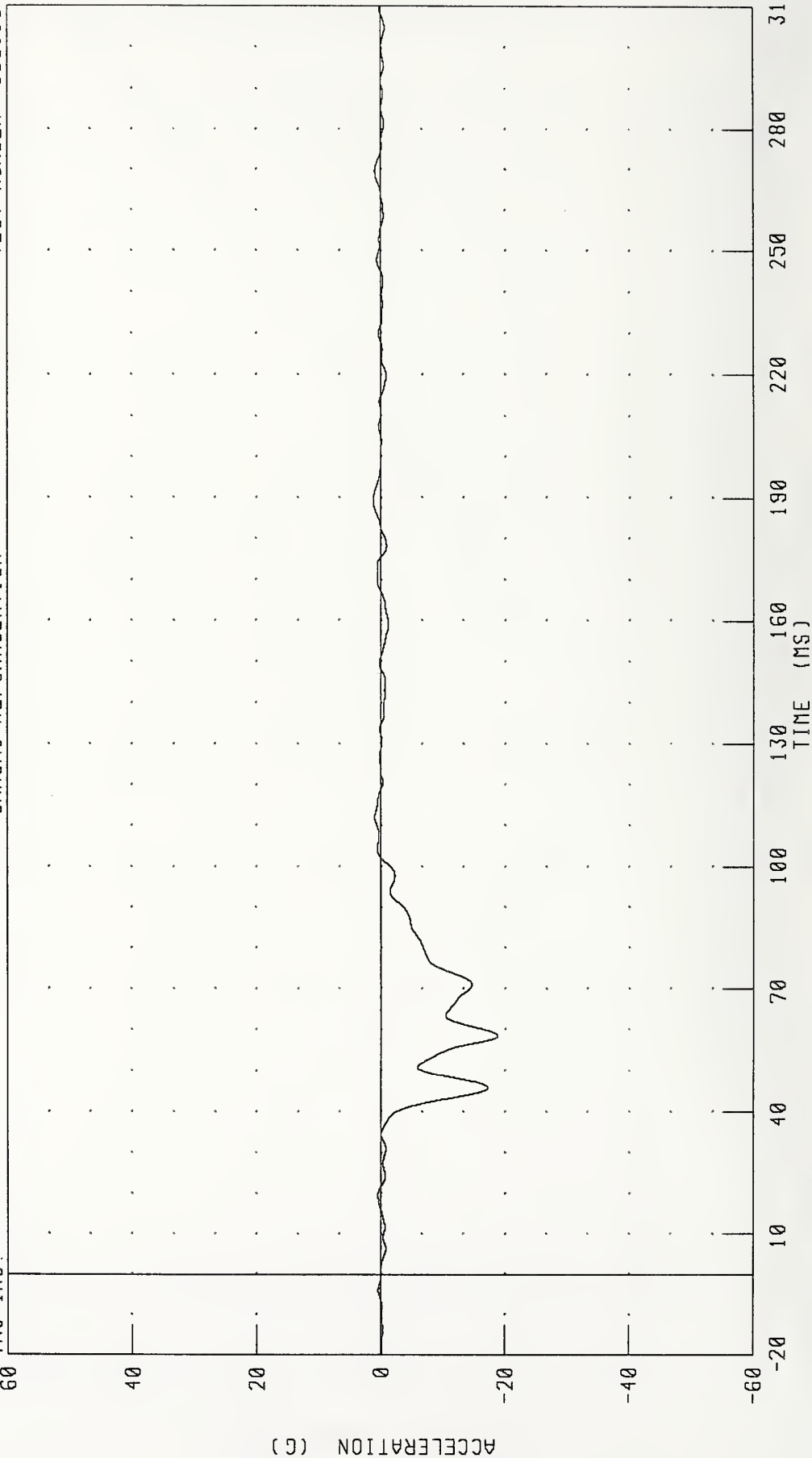
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5

LEFT FRONT SILL X-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.



CHANNEL LFSXG1 FILTER CH CLASS 60

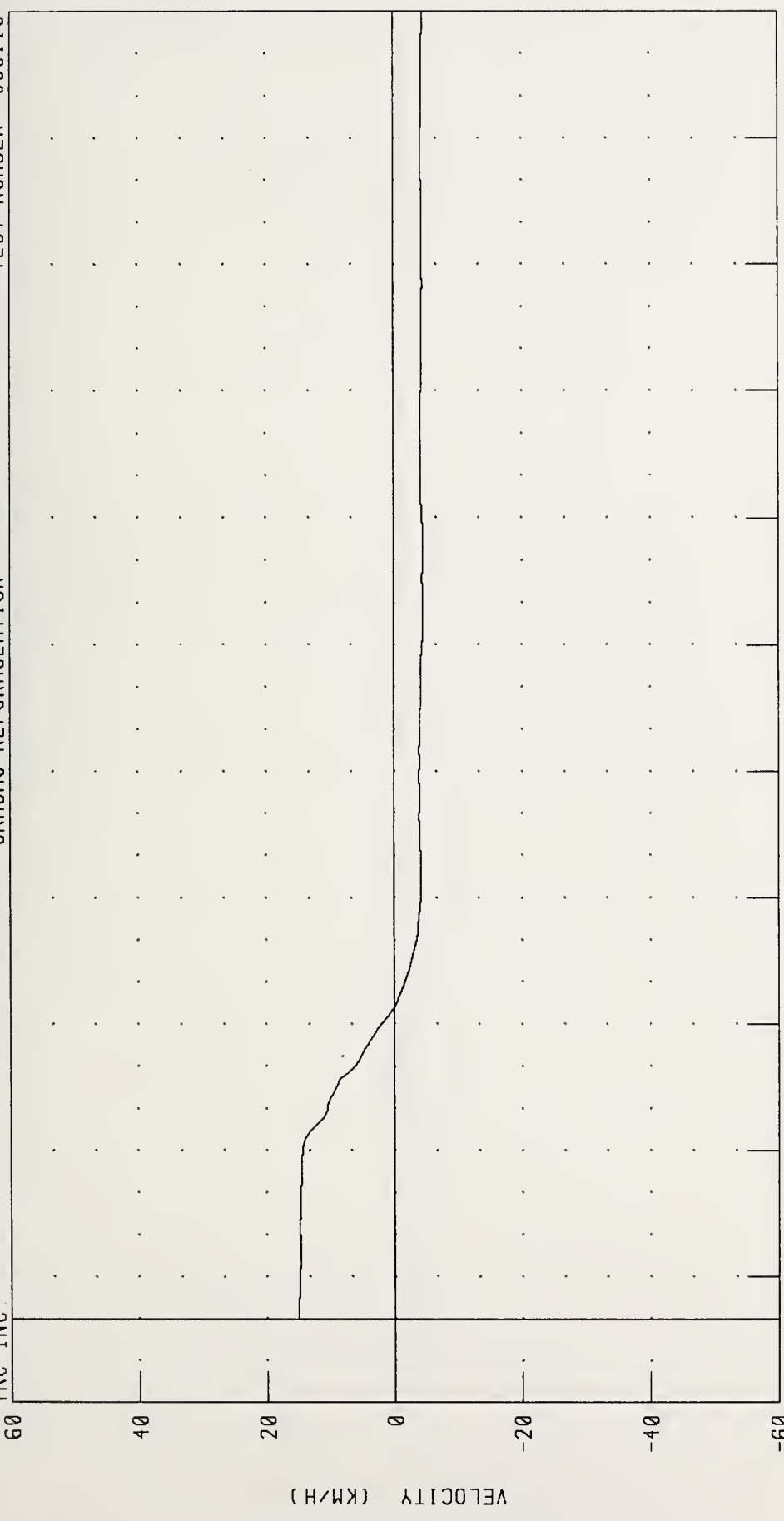
PEAK DATA: 1.27 G @ 189.36 MS, -18.84 G @ 58.48 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
 LEFT FRONT SILL X-AXIS VELOCITY

TEST NUMBER 950119

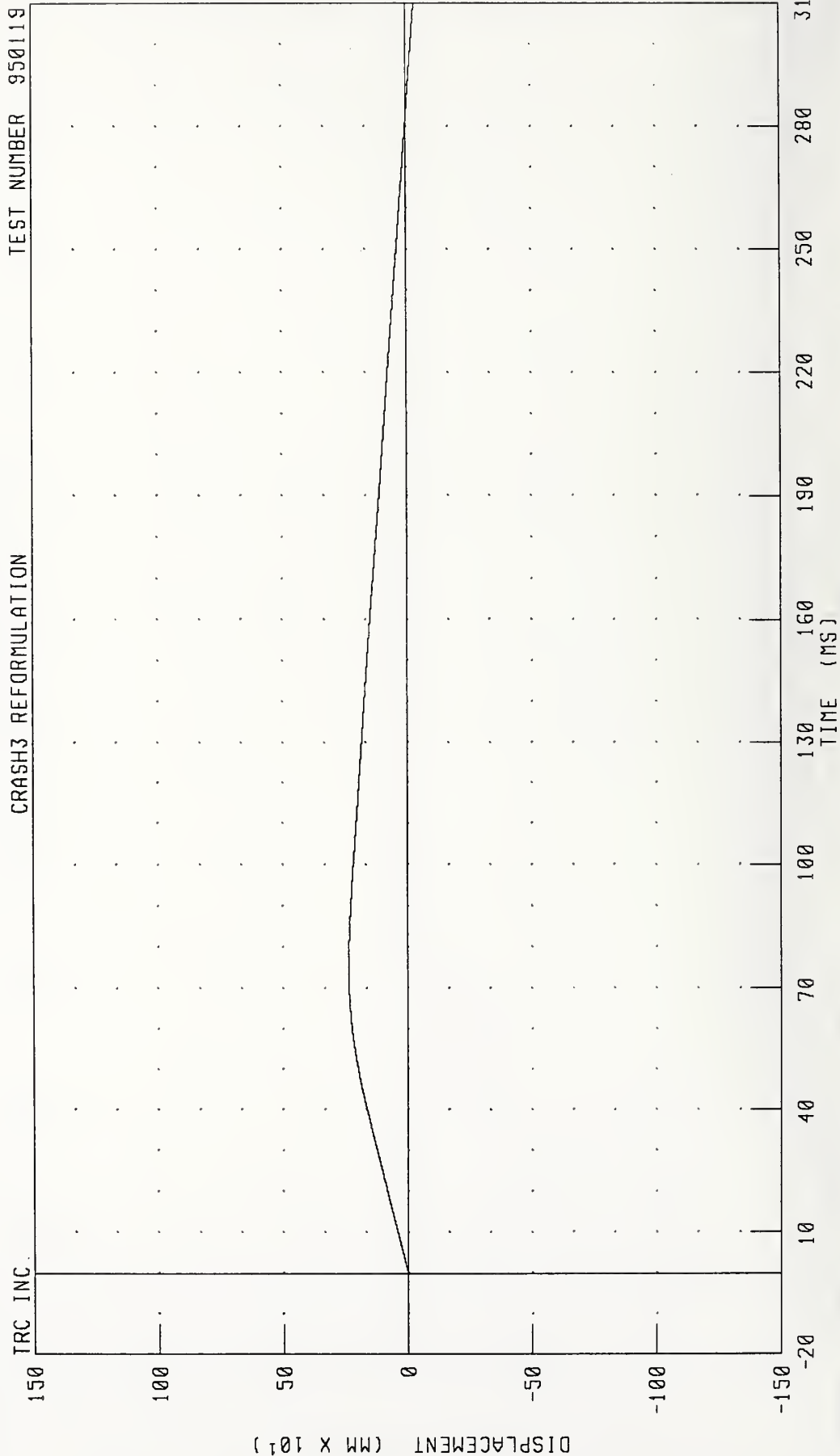
CRASH3 REFORMULATION

TRC INC



CHANNEL: LFSXV1 FILTER: CH CLASS 180 PEAK DATA: 15.01 KM/H @ 2.56 MS, -4.62 KM/H @ 181.60 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
LEFT FRONT SILL X-AXIS DISPLACEMENT



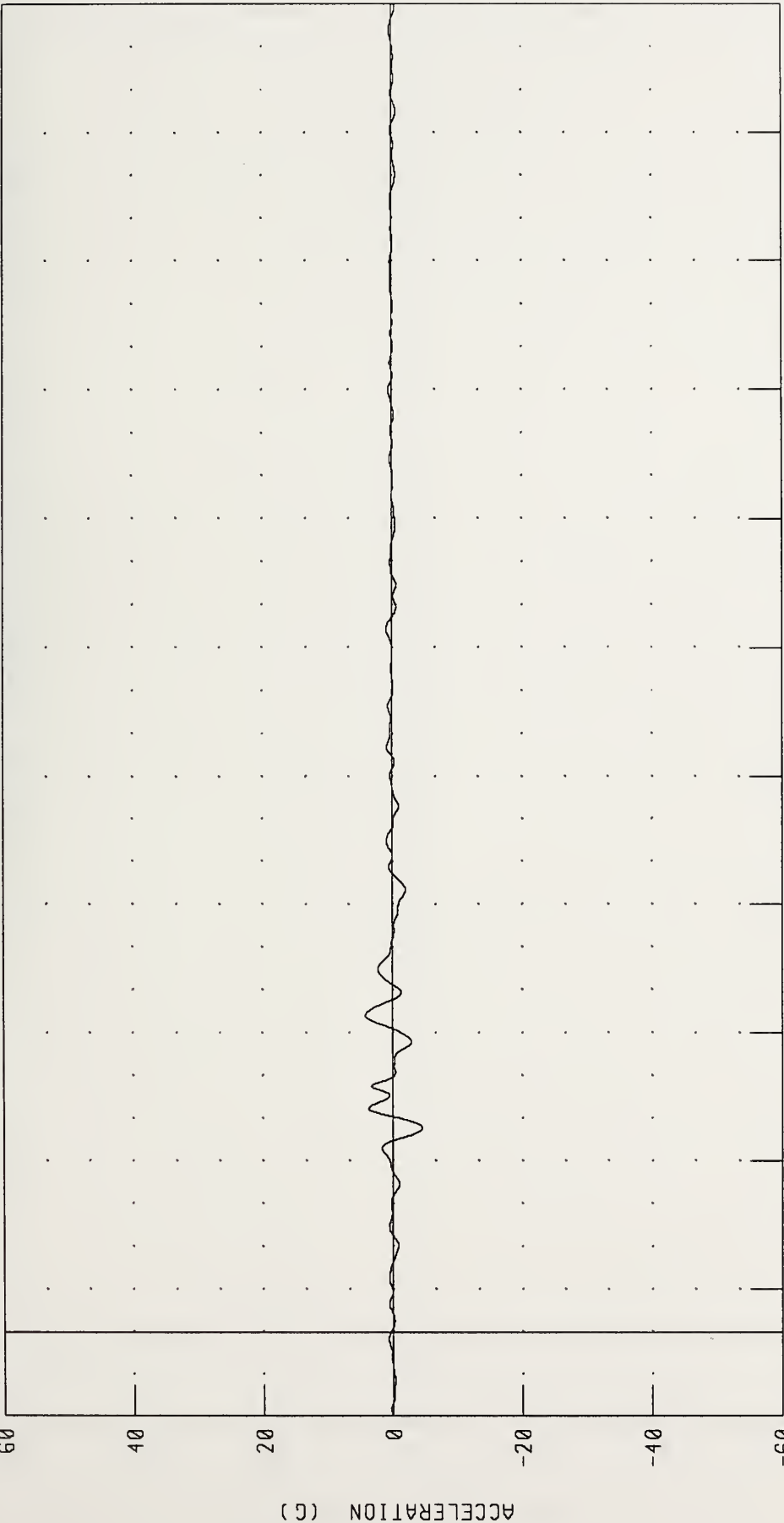
CHANNEL: LFSXD1 FILTER: CH CLASS 180

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
LEFT FRONT SILL Y-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC

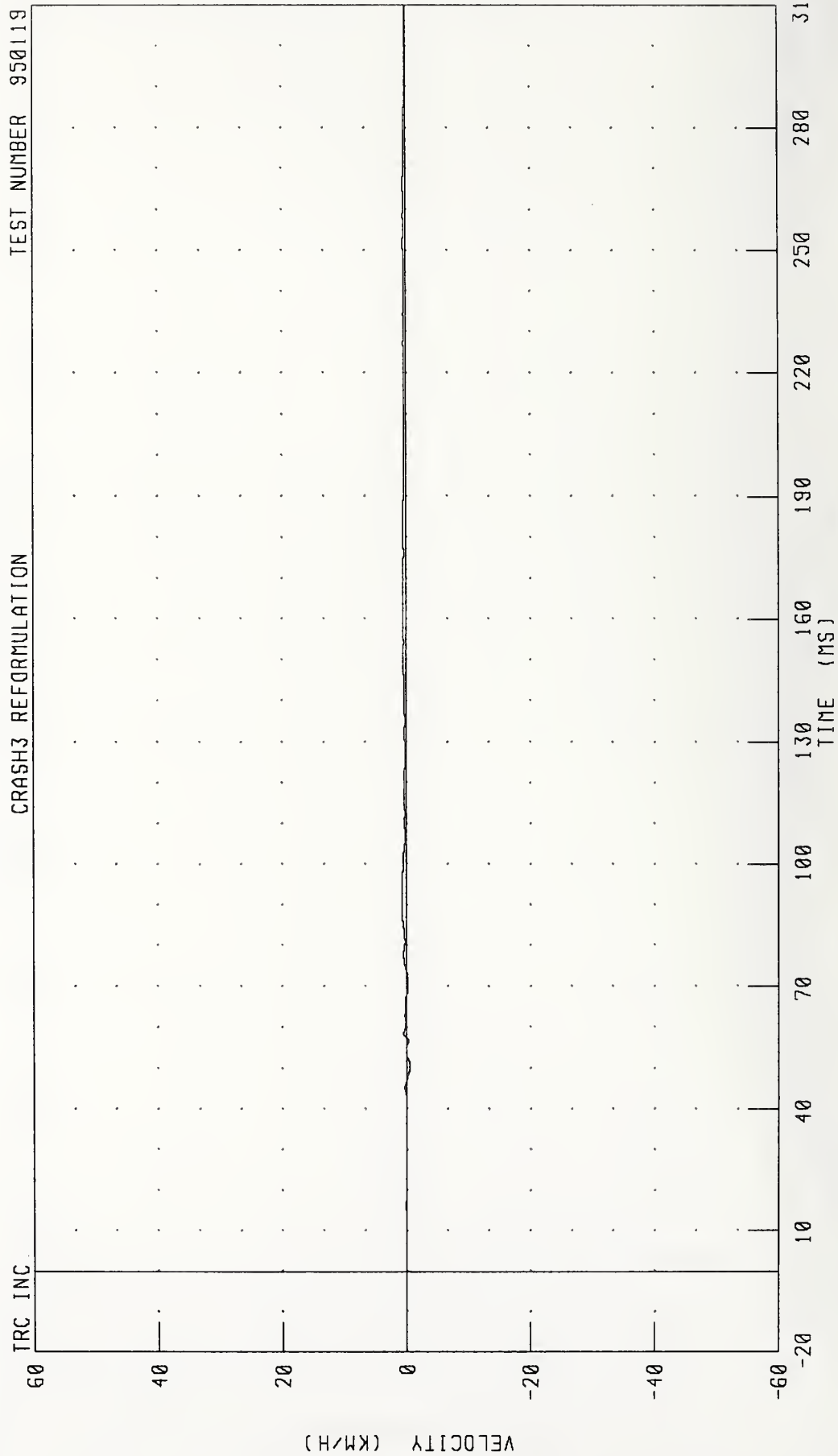
TEST NUMBER 950119



CHANNEL: LFSYG1 FILTER: CH. CLASS 60

PEAK DATA: 4.19 G @ 74.08 MS, -4.50 G @ 47.68 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
LEFT FRONT SILL Y-AXIS VELOCITY



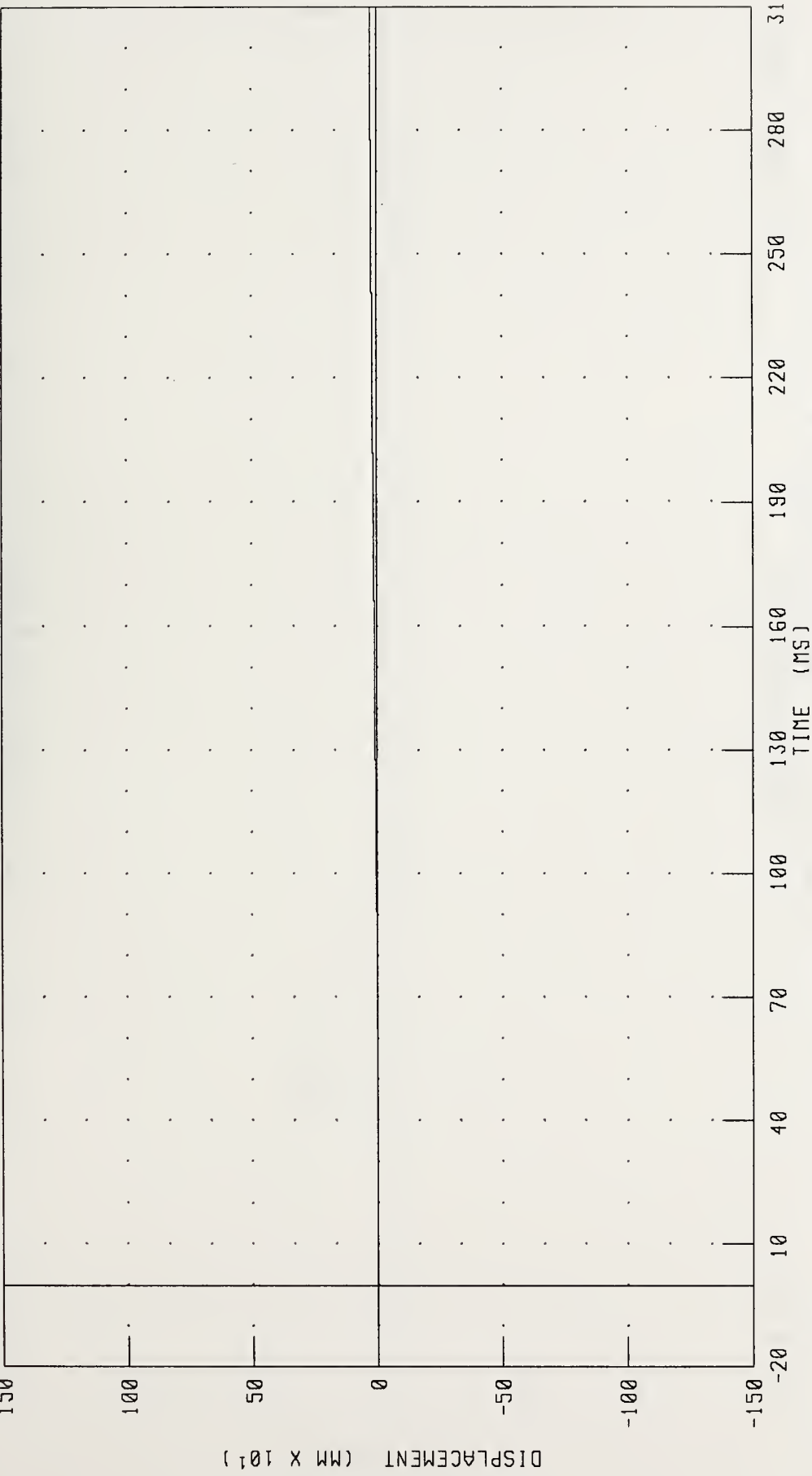
CHANNEL: LFSYV1 FILTER: CH CLASS 180

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
LEFT FRONT SILL Y-AXIS DISPLACEMENT

TEST NUMBER 950119

CRASH3 REFORMULATION

TRC INC



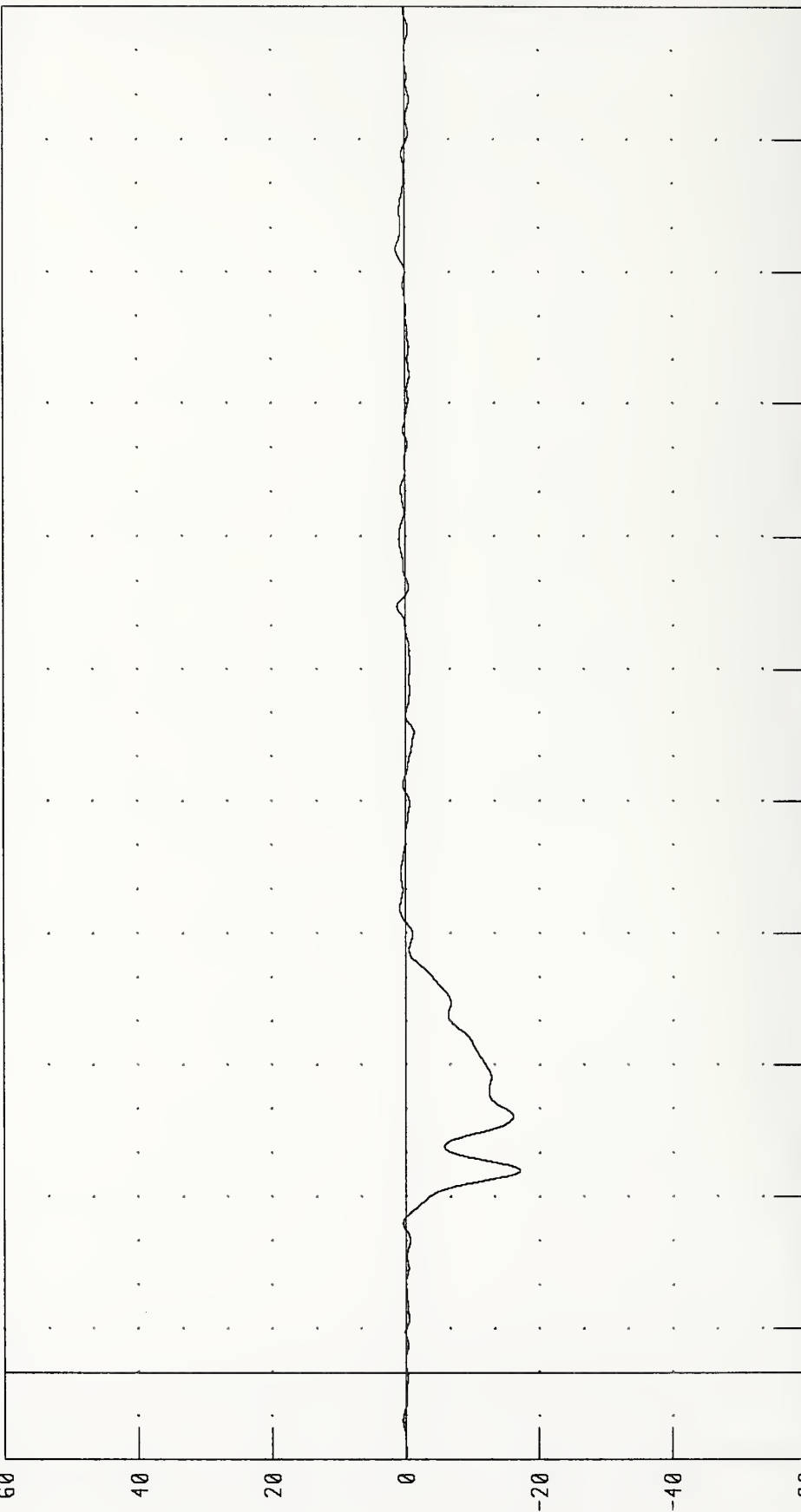
CHANNEL: LFSYD1 FILTER: CH. CLASS 180 PEAK DATA: 25.44 MM @ 310.00 MS, -0.13 MM @ 57.36 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
RIGHT FRONT SILL X-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC.

60



TEST NUMBER 950119

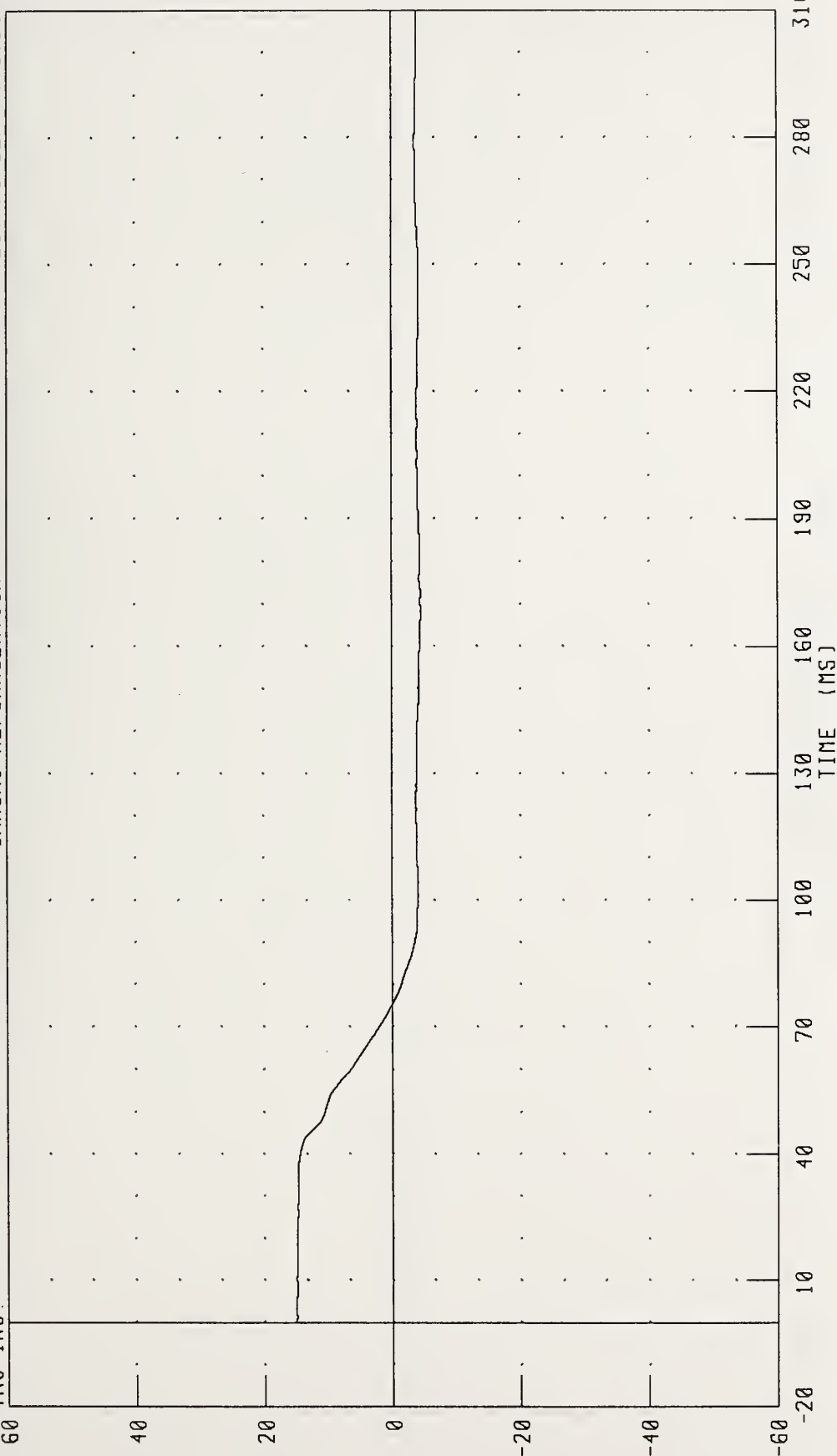
CHANNEL: RFSXG1 FILTER: CH. CLASS 60

PEAK DATA: 1.32 G @ 255.28 MS, -17.16 G @ 46.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
 RIGHT FRONT SILL X-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119

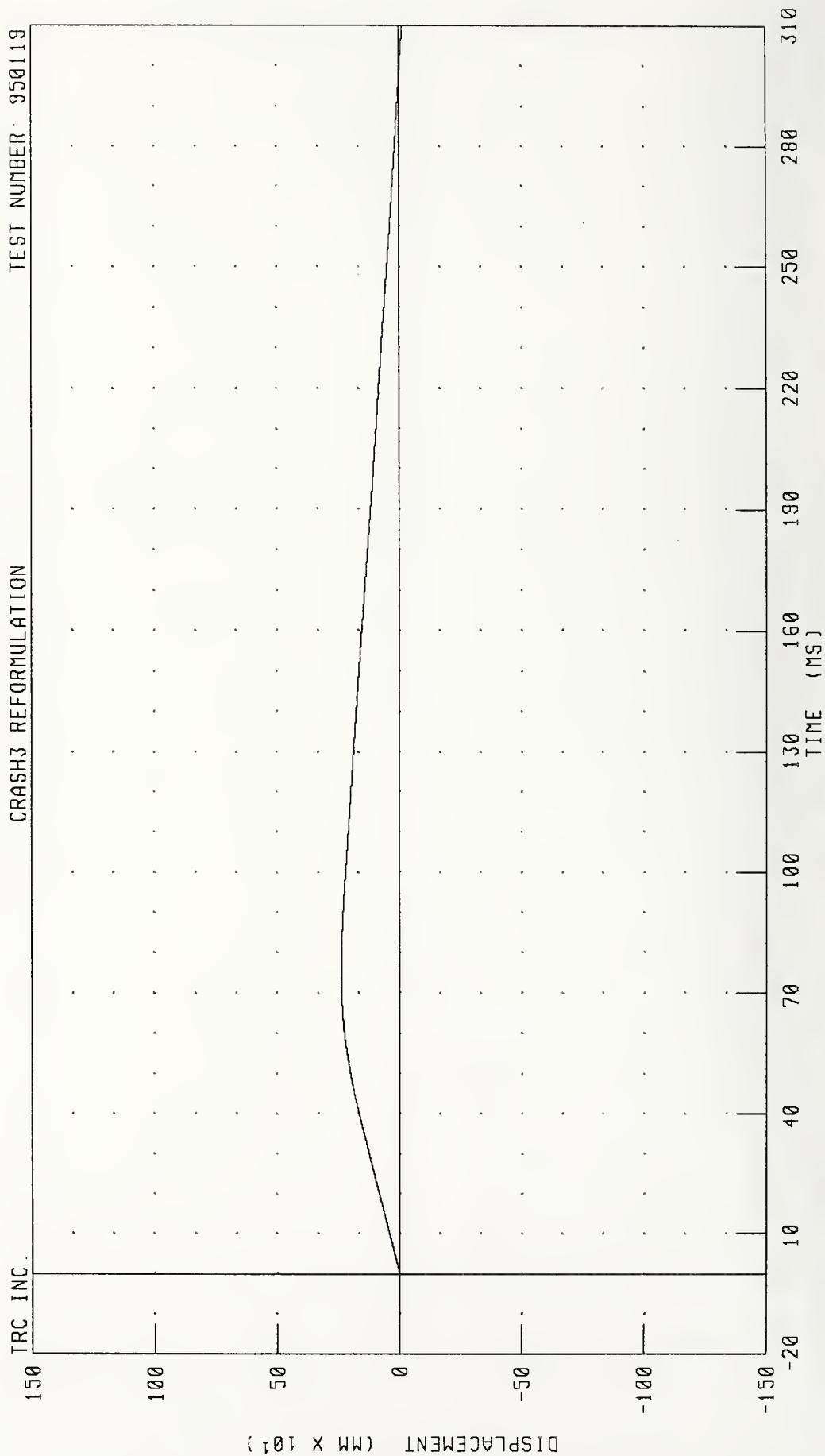
TRC INC.



CHANNEL: RFSXV1 FILTER: CH CLASS 180

PEAK DATA: 15.02 KM/H @ 4.88 MS; -4.50 KM/H @ 172.64 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
 RIGHT FRONT SILL X-AXIS DISPLACEMENT

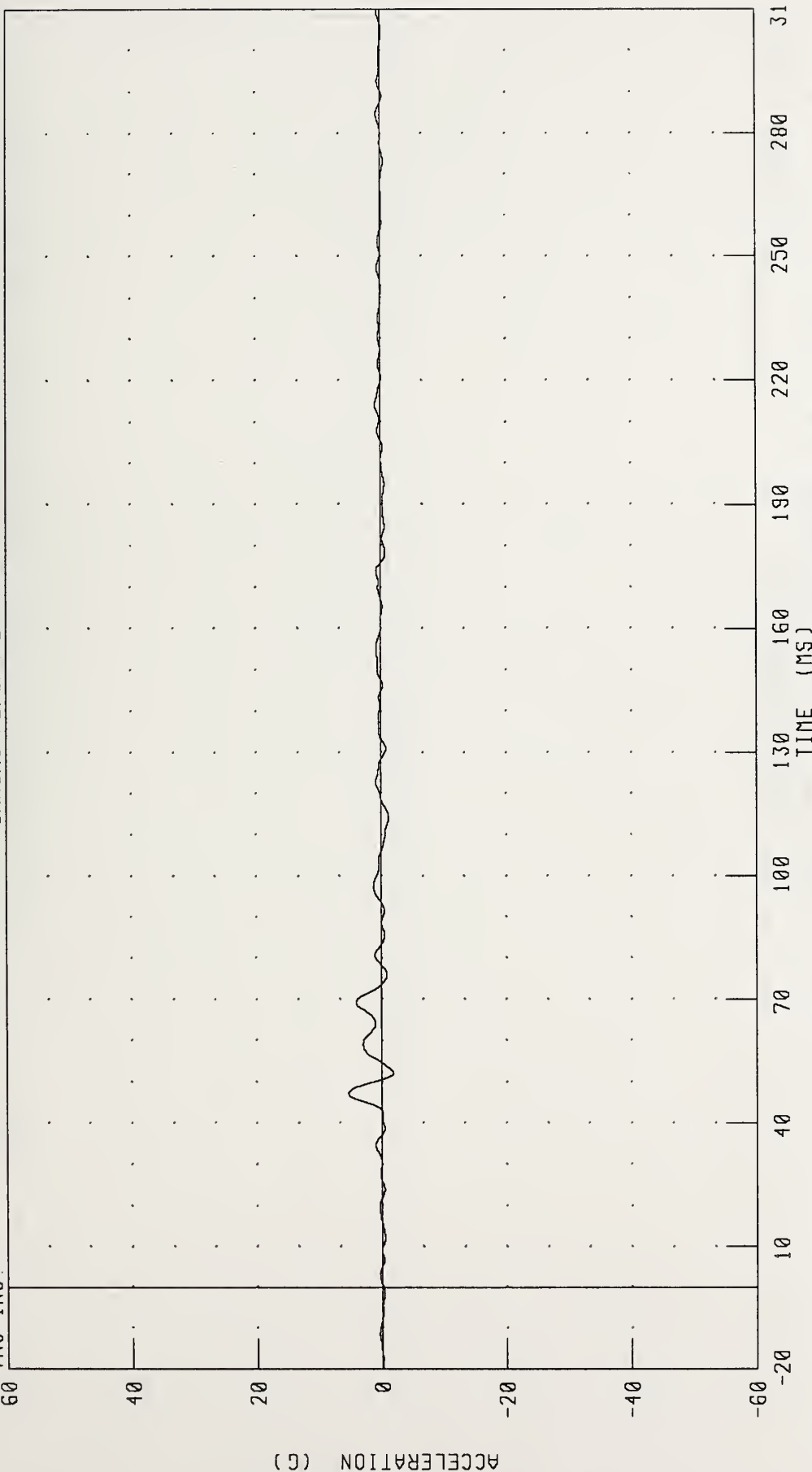


1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
RIGHT FRONT SILL Y-AXIS ACCELERATION

TEST NUMBER 950119

CRASH3 REFORMULATION

TRC INC.



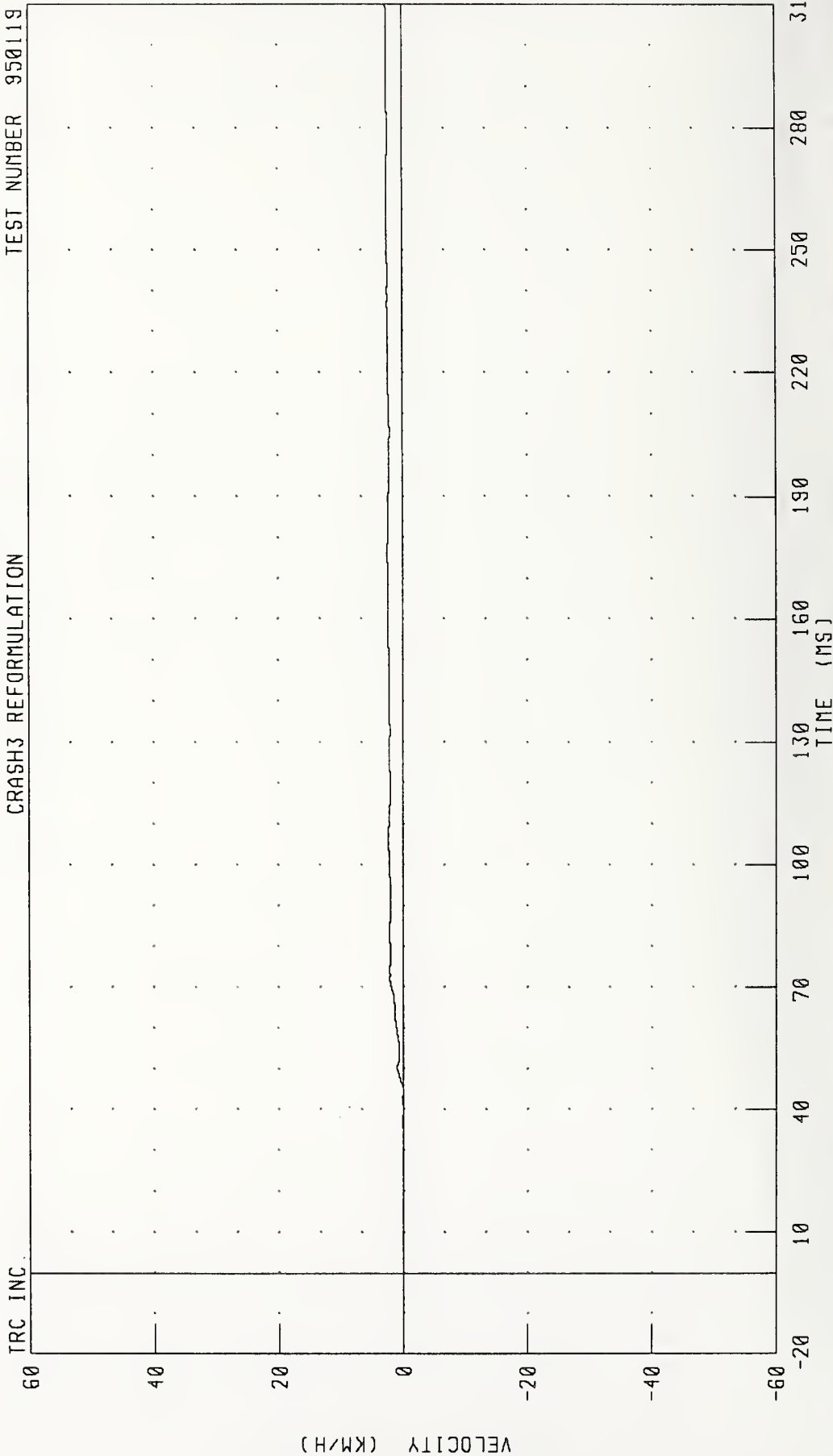
CHANNEL RFSYGI FILTER CH CLASS 60

PEAK DATA: 5 35 G @ 47 20 MS, -1 83 G @ 52 08 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5

RIGHT FRONT SILL Y-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119



CHANNEL: RFSYV1 FILTER: CH CLASS 180

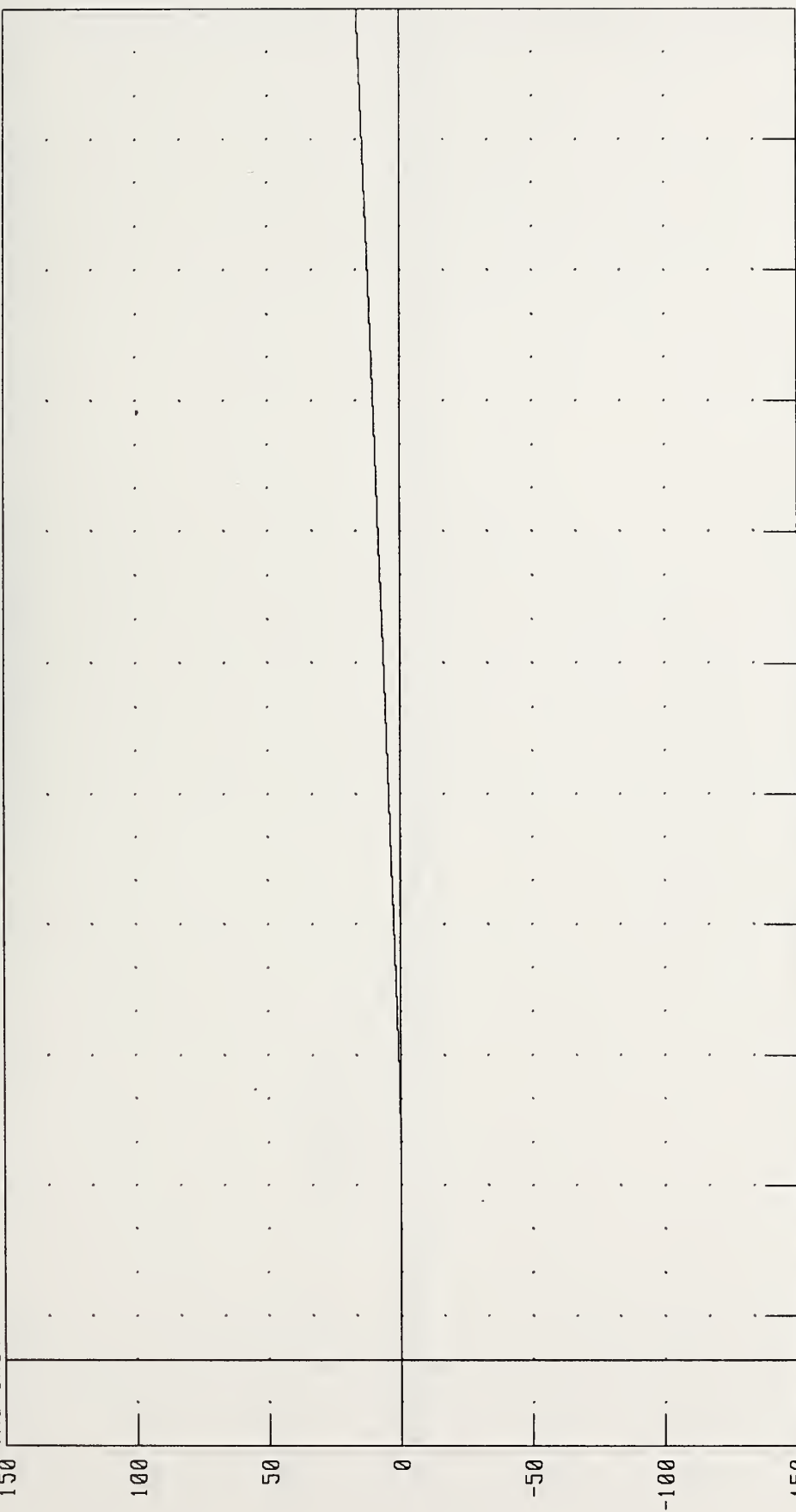
PEAK DATA: 2.66 KM/H @ 310.00 MS, -0.04 KM/H @ 25.76 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
 RIGHT FRONT SILL Y-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.

DISPLACEMENT (MM X 10¹)



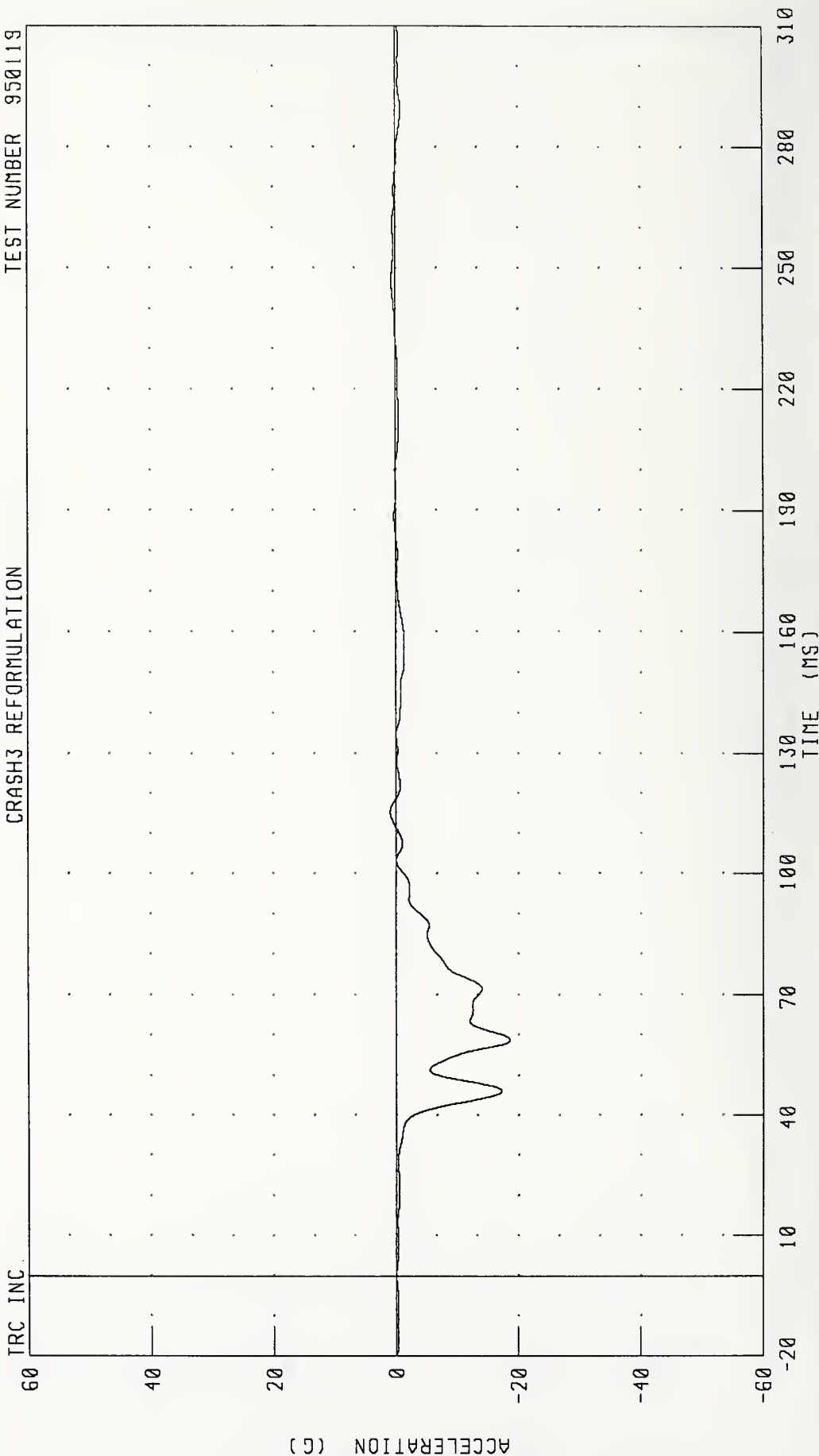
CHANNEL: RFSY01 FILTER: CH. CLASS 180 PEAK DATA: 163.02 MM @ 310.00 MS, 0.00 MM @ 0.16 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5

LEFT REAR SEAT X-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119



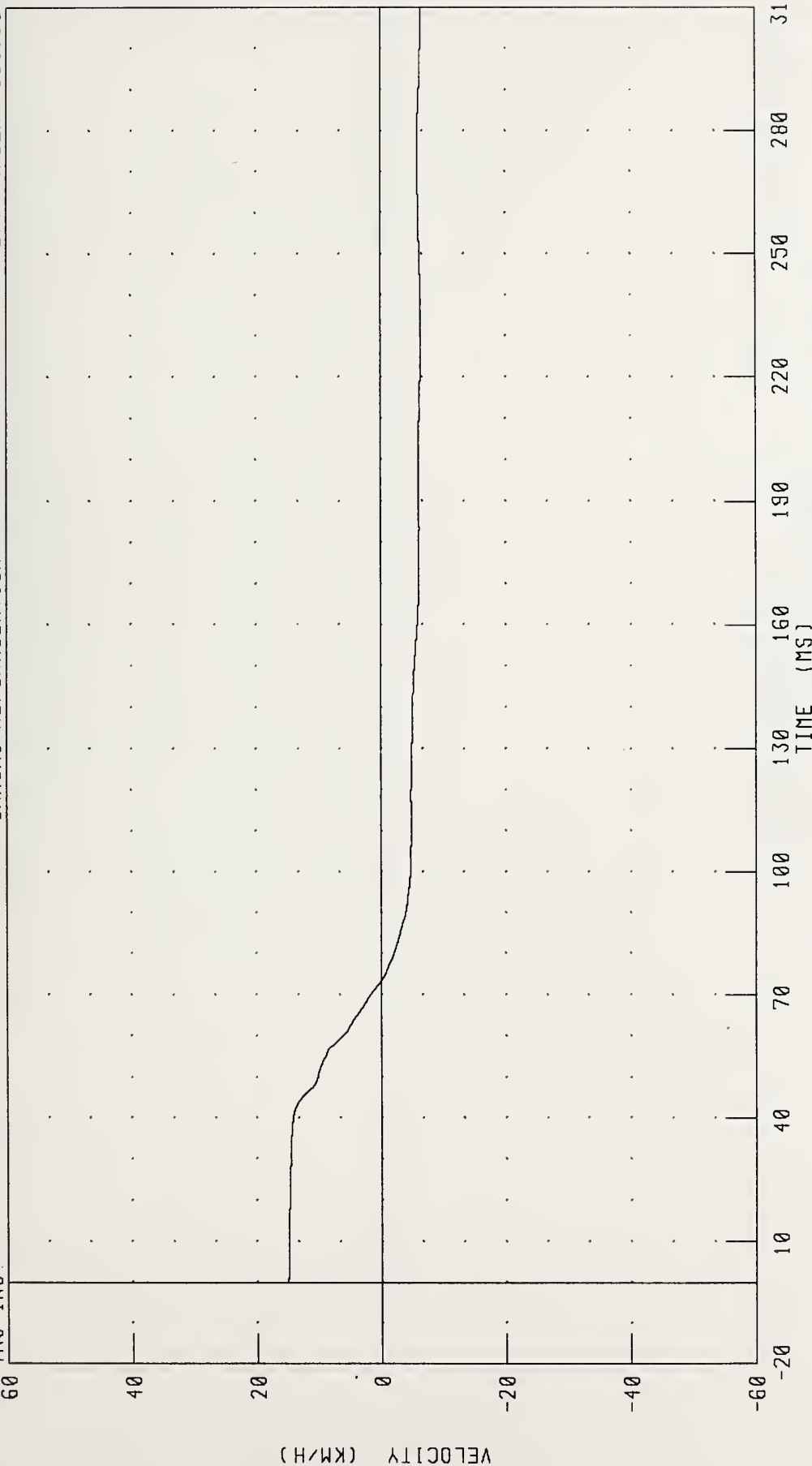
CHANNEL: TLRXG1 FILTER: CH. CLASS 60

PEAK DATA: 0 95 G @ 115.36 MS, -18 65 G @ 58 88 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
LEFT REAR SEAT X-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



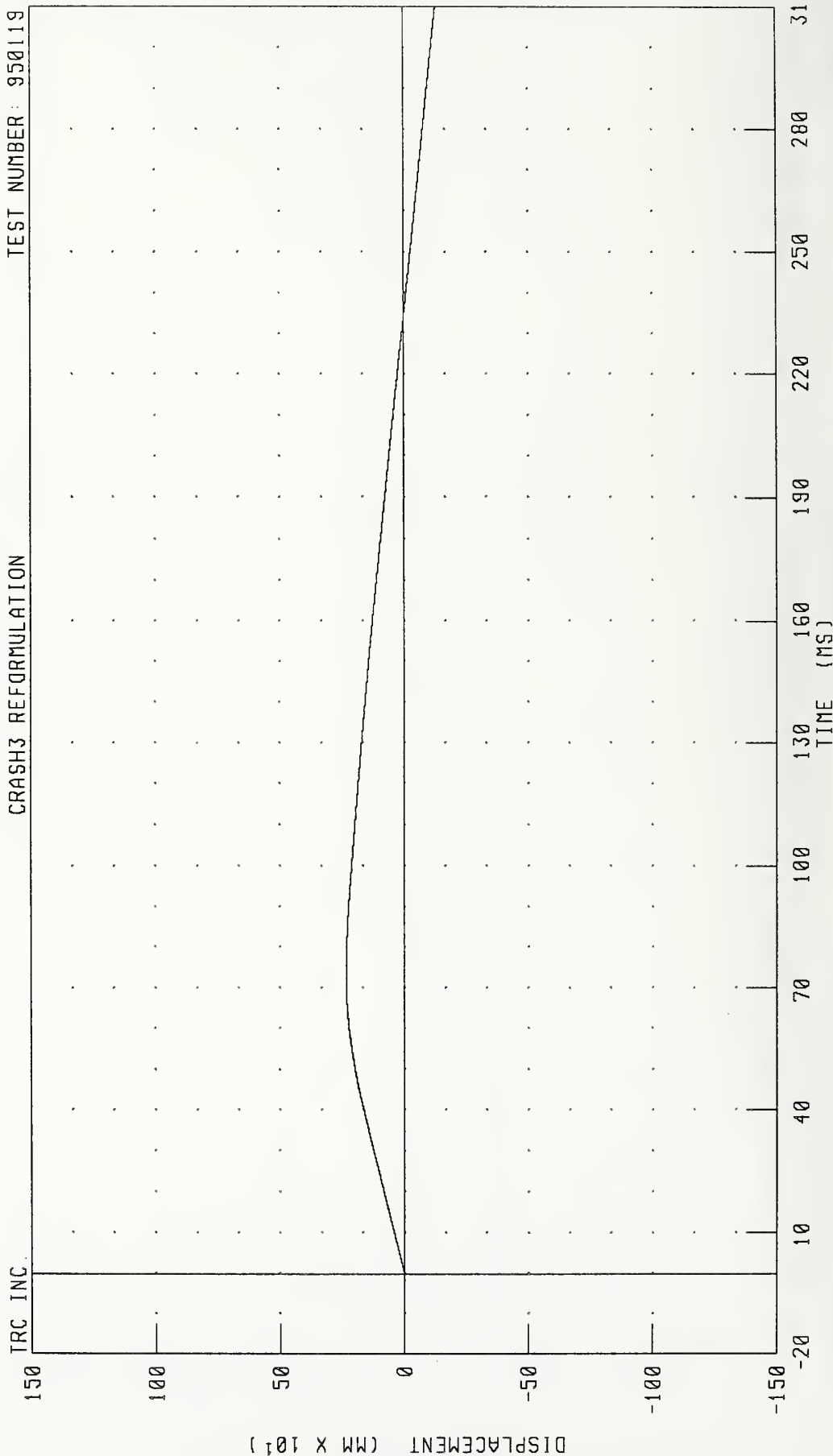
CHANNEL: TLRXV1 FILTER: CH. CLASS 180

PEAK DATA: 15.00 KM/H @ 0.24 MS; -6.49 KM/H @ 310.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
LEFT REAR SEAT X-AXIS DISPLACEMENT

TEST NUMBER: 950119

CRASH3 REFORMULATION



CHANNEL: TLRX01 FILTER: CH. CLASS 180

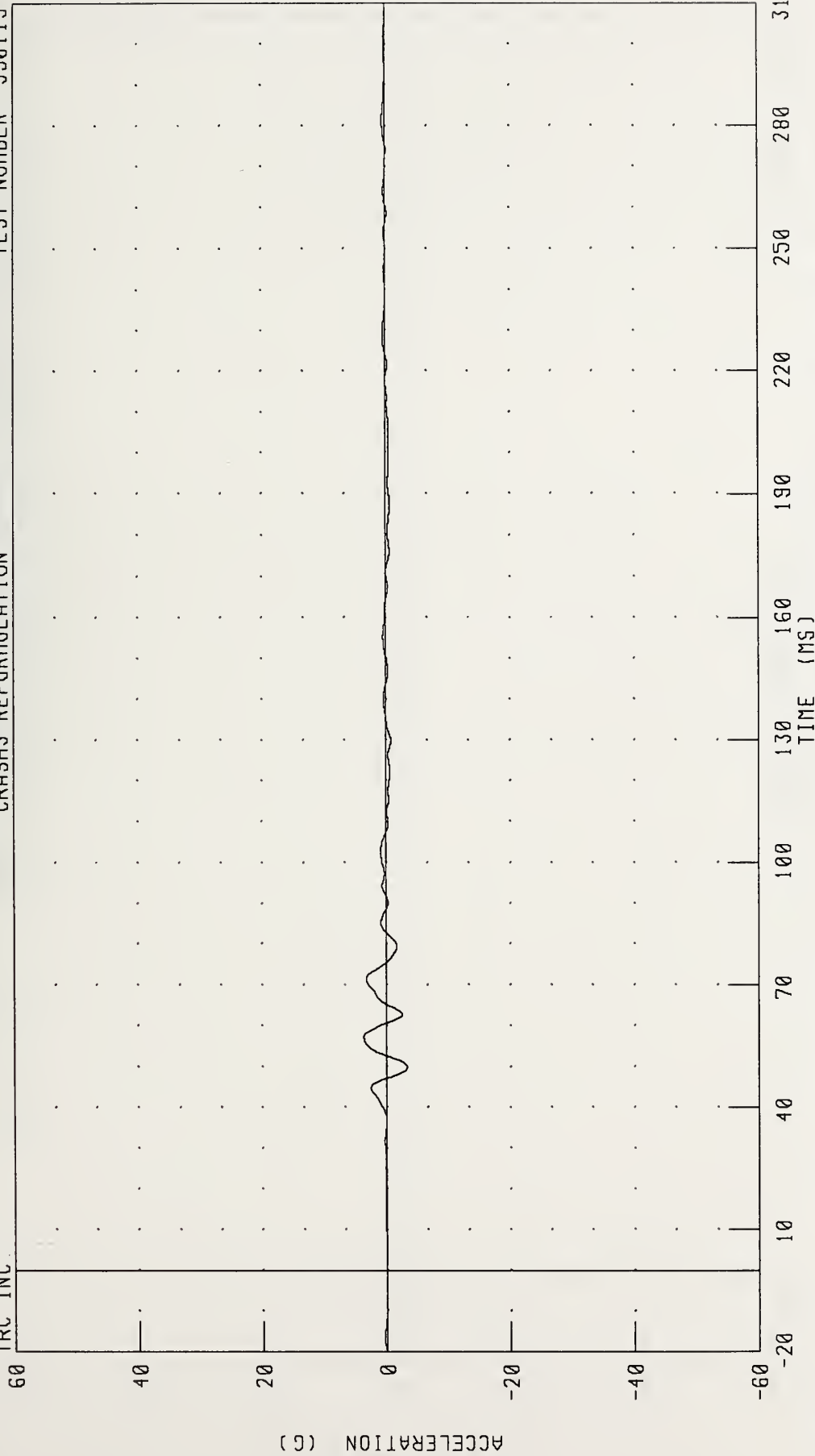
PEAK DATA: 234.78 MM @ 73.44 MS, -129.97 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
LEFT REAR SEAT Y-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC

TEST NUMBER 950119

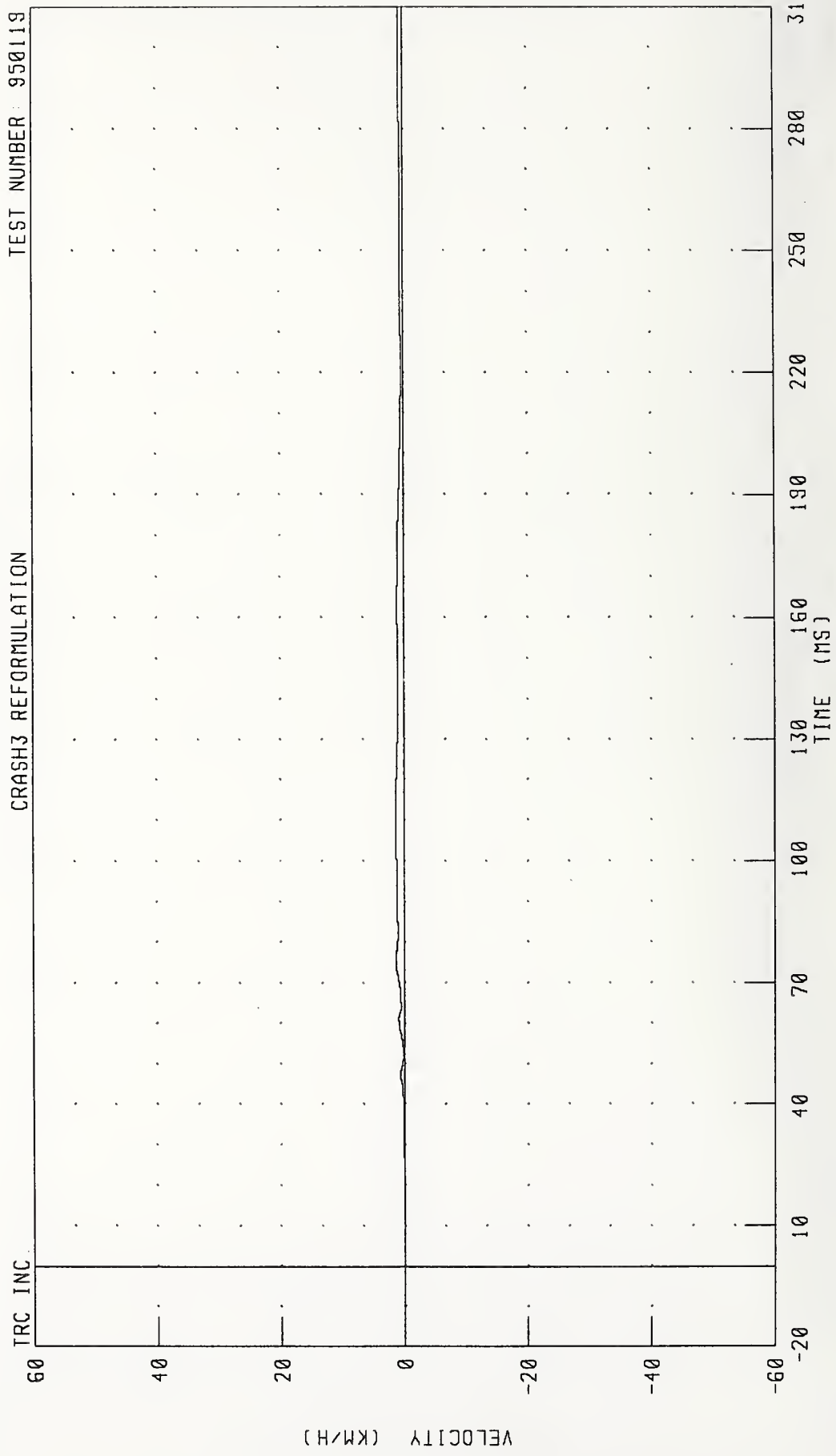


CHANNEL: TLRYG1 FILTER: CH CLASS: 60

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
 LEFT REAR SEAT Y-AXIS VELOCITY

TEST NUMBER: 950119

CRASH3 REFORMULATION



CHANNEL: TLRYV1 FILTER: CH CLASS 180

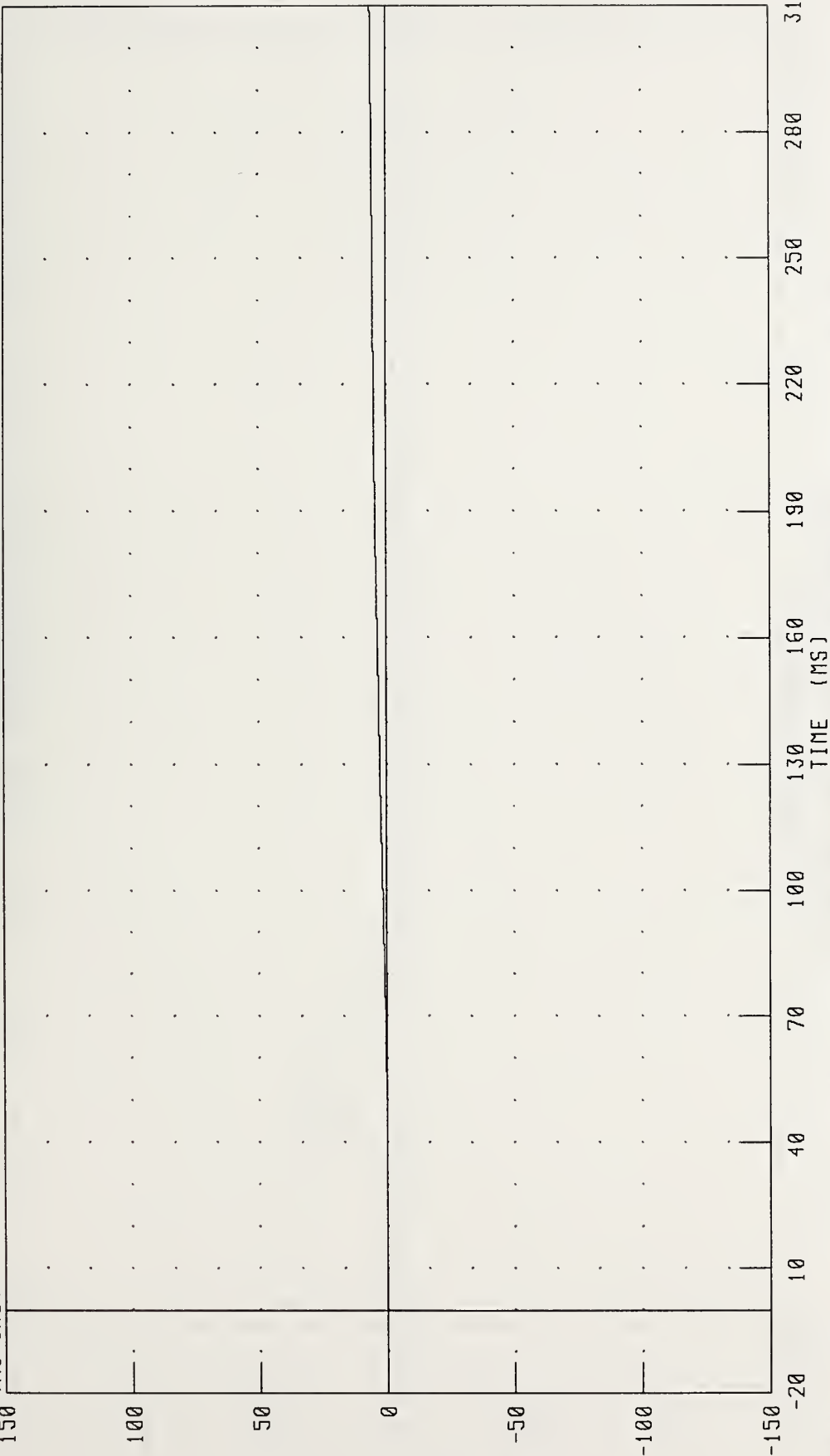
PEAK DATA: 1.44 KM/H @ 107.84 MS, -0.01 KM/H @ 7.20 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5 LEFT REAR SEAT Y-AXIS DISPLACEMENT

TEST NUMBER 950119

CRASH3 REFORMULATION

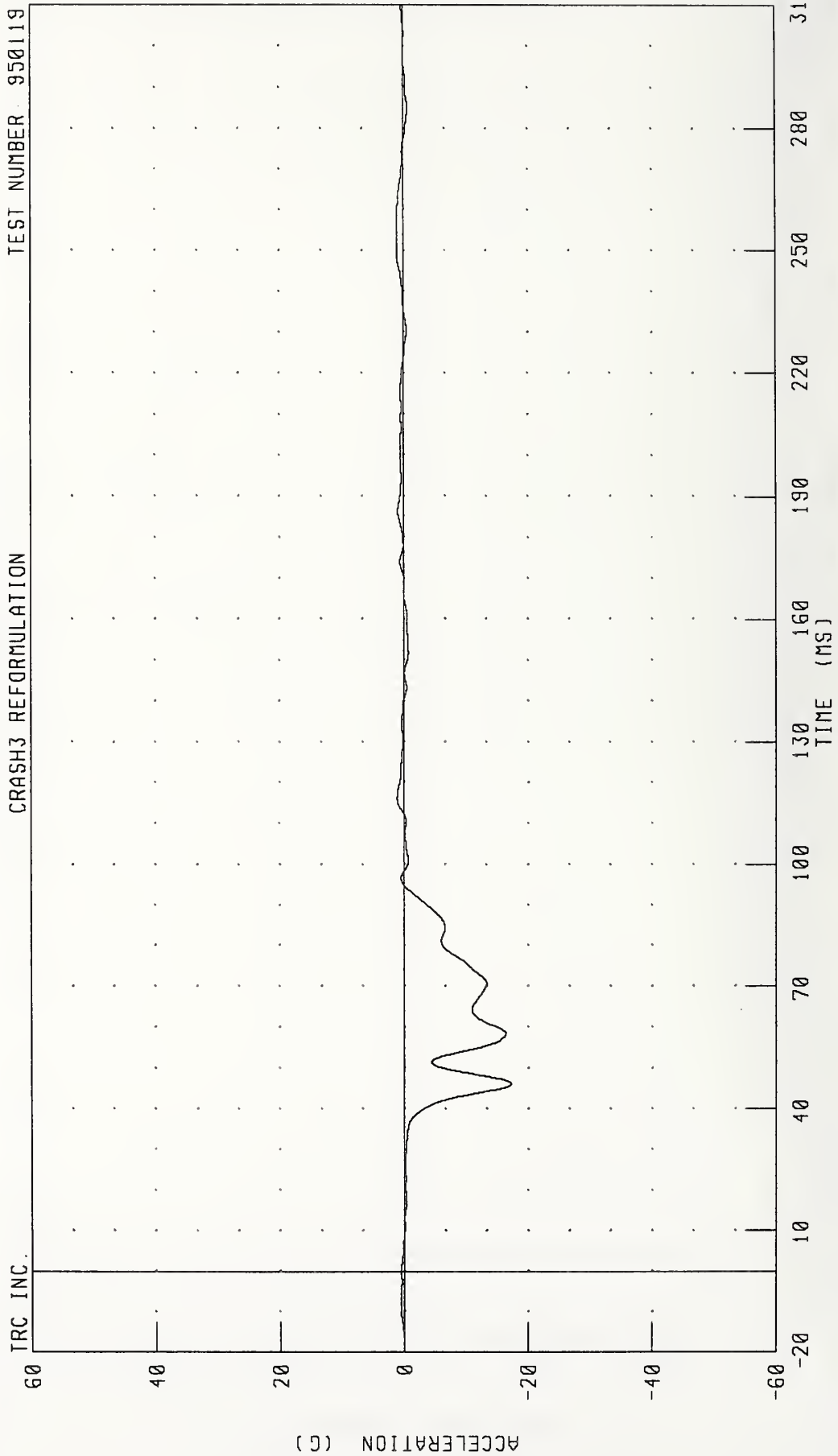
TRC INC.



CHANNEL TLRD1 FILTER: CH. CLASS 180

PEAK DATA: 62.02 MM @ 310.00 MS, 0.00 MM @ 8.48 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
RIGHT REAR SEAT X-AXIS ACCELERATION

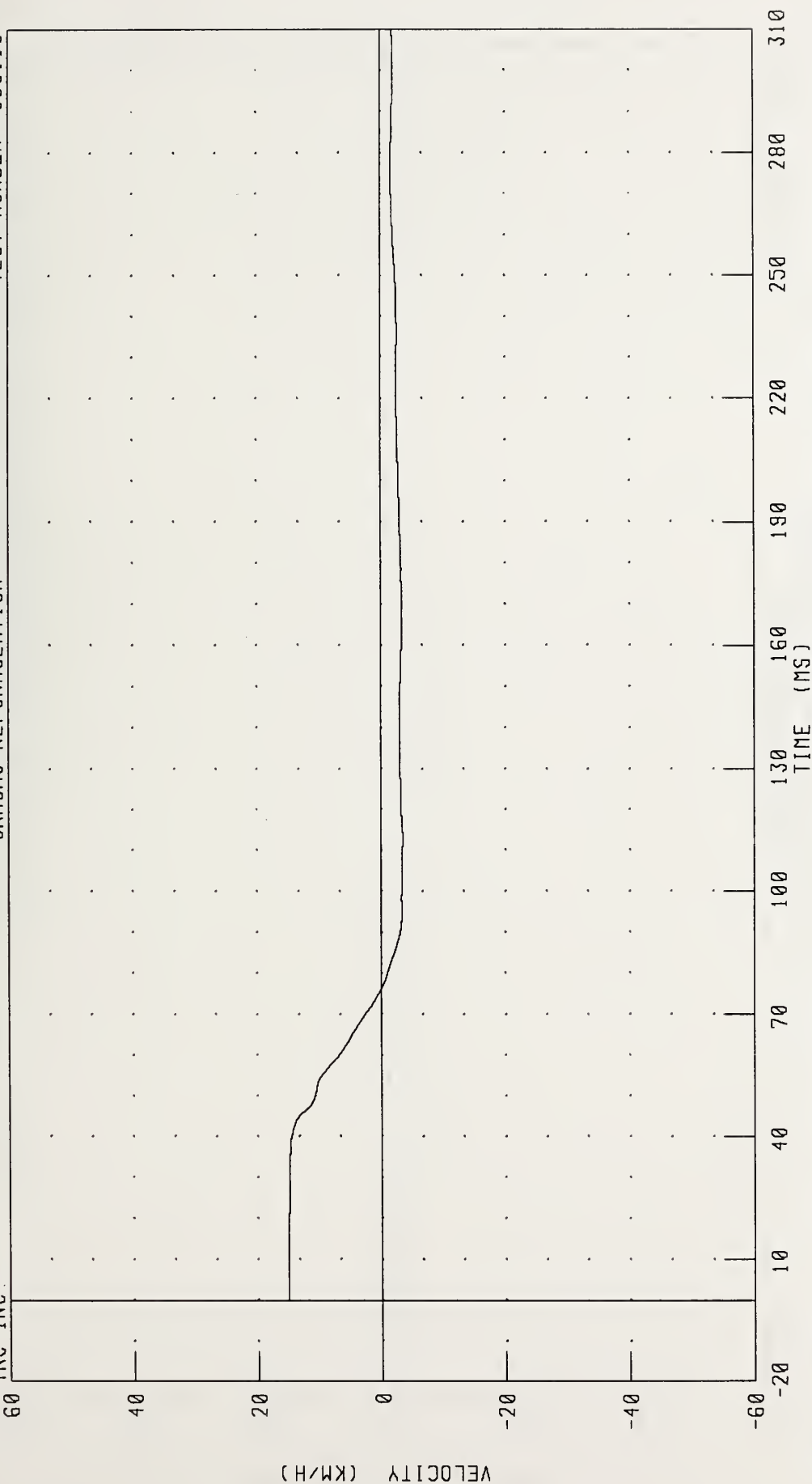


CHANNEL: TRRXG1 FILTER: CH CLASS 60

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
 RIGHT REAR SEAT X-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



PEAK DATA: 15.08 KM/H @ 96 MS, -3.49 KM/H @ 112.64 MS

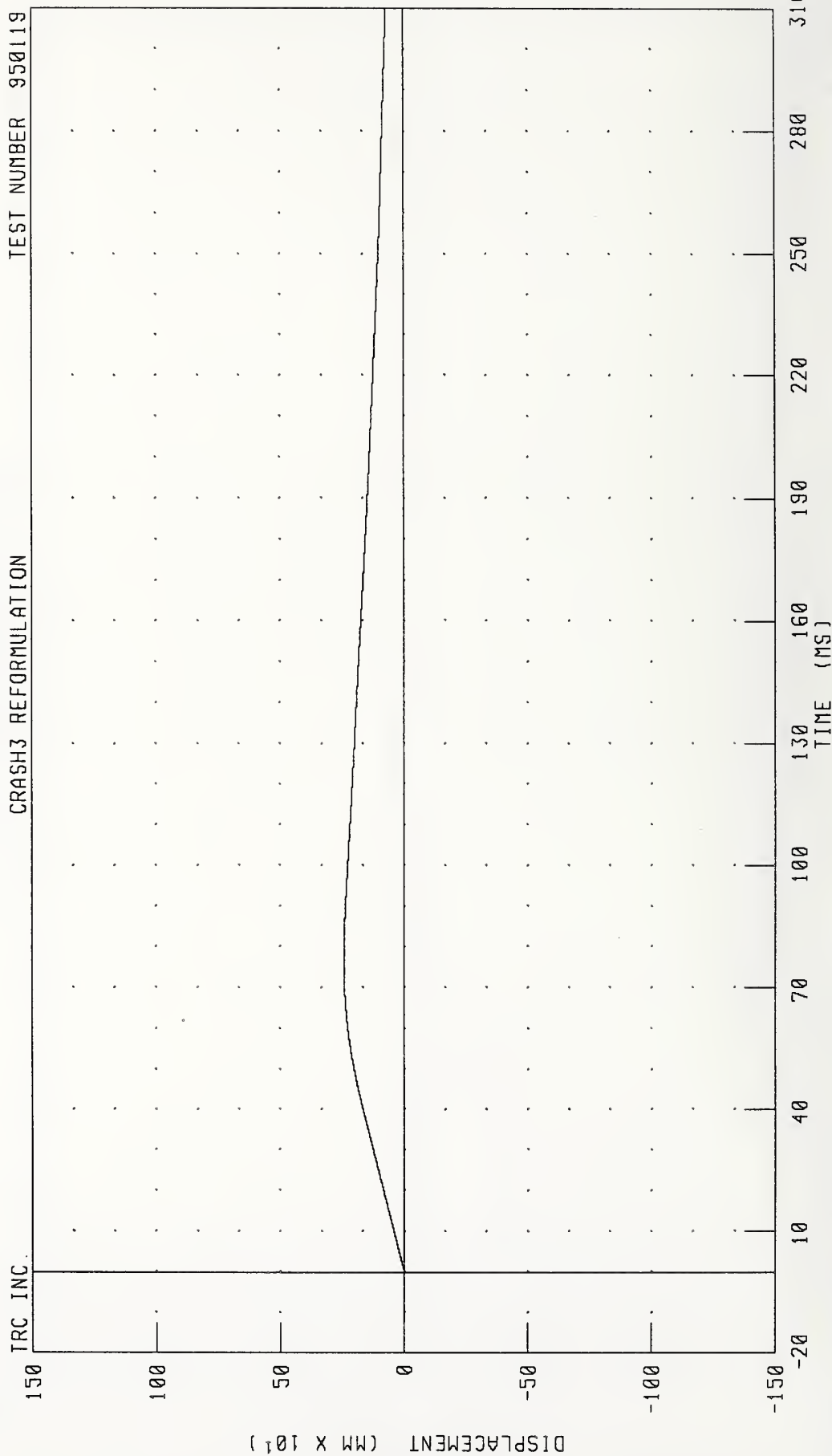
CHANNEL TRRXV1 FILTER CH CLASS 180

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5

RIGHT REAR SEAT X-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TEST NUMBER 950119



CHANNEL: TRRXD1 FILTER: CH. CLASS 180

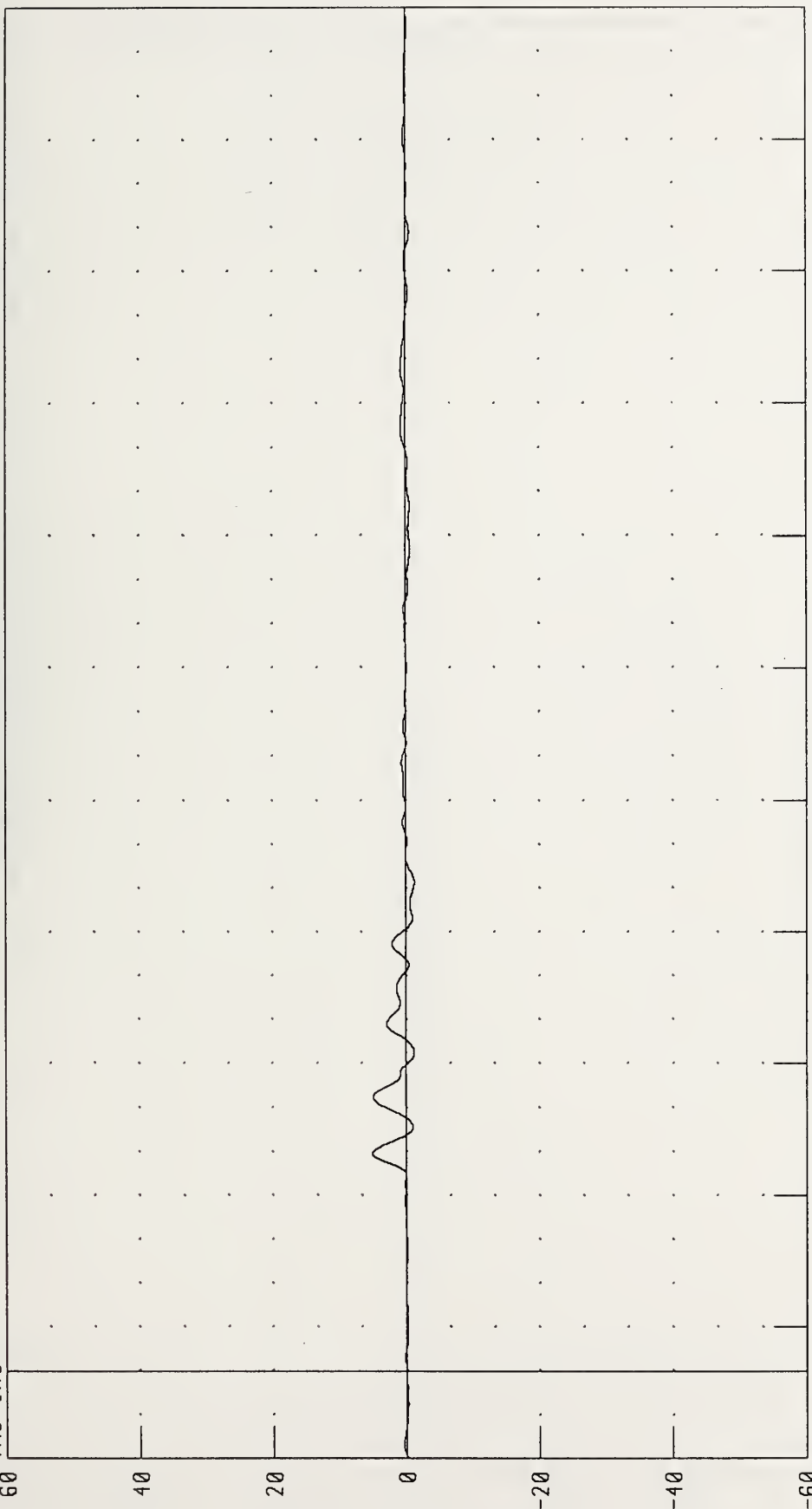
PEAK DATA: 243.49 MM @ 76.32 MS; 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
RIGHT REAR SEAT Y-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC

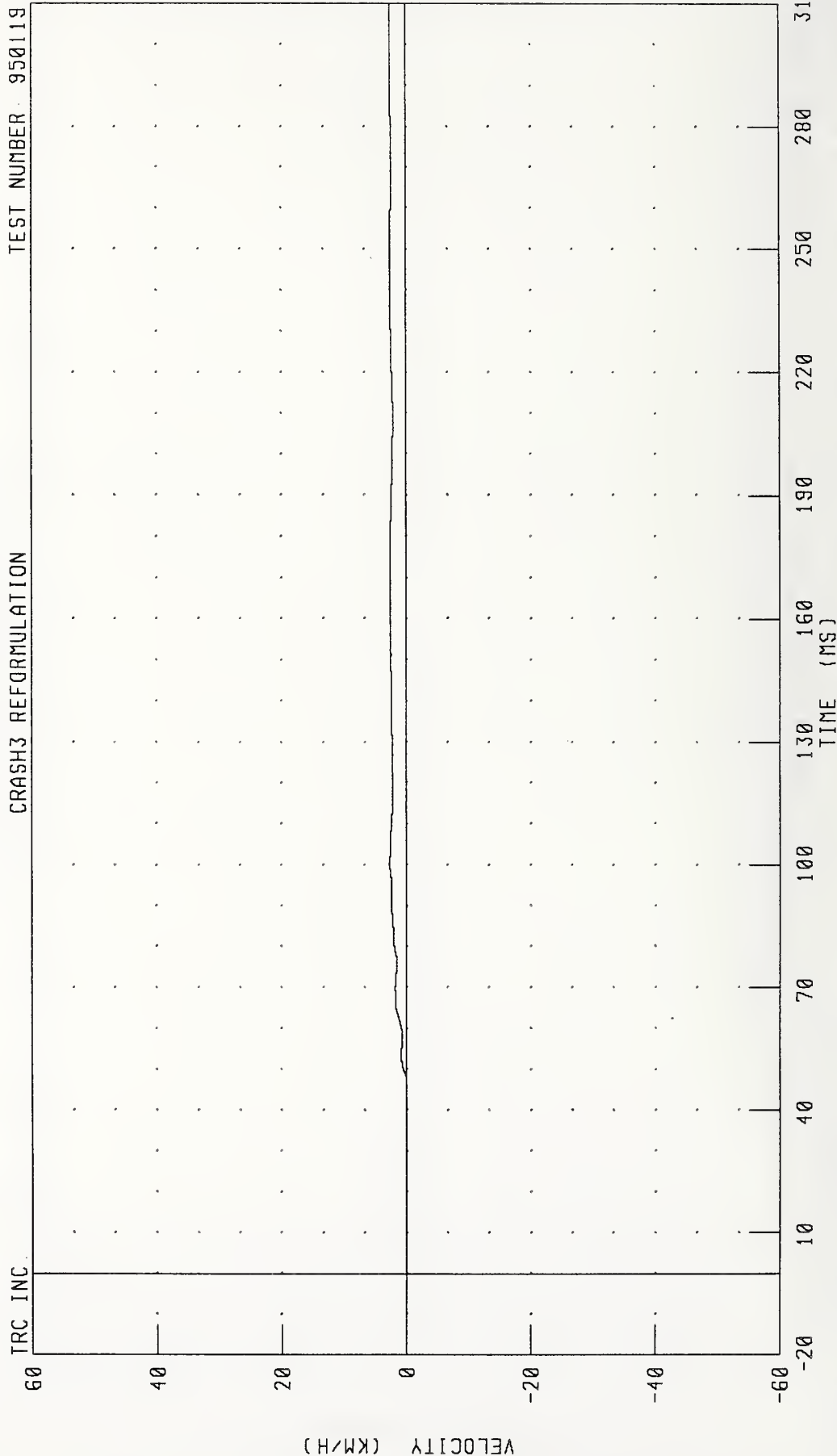


CHANNEL: TRRYG1 FILTER: CH CLASS 60
PEAK DATA: 5.10 G @ 49.52 MS, -1.29 G @ 111.44 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5

RIGHT REAR SEAT Y-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119



CHANNEL: TRRYV1 FILTER: CH. CLASS 180

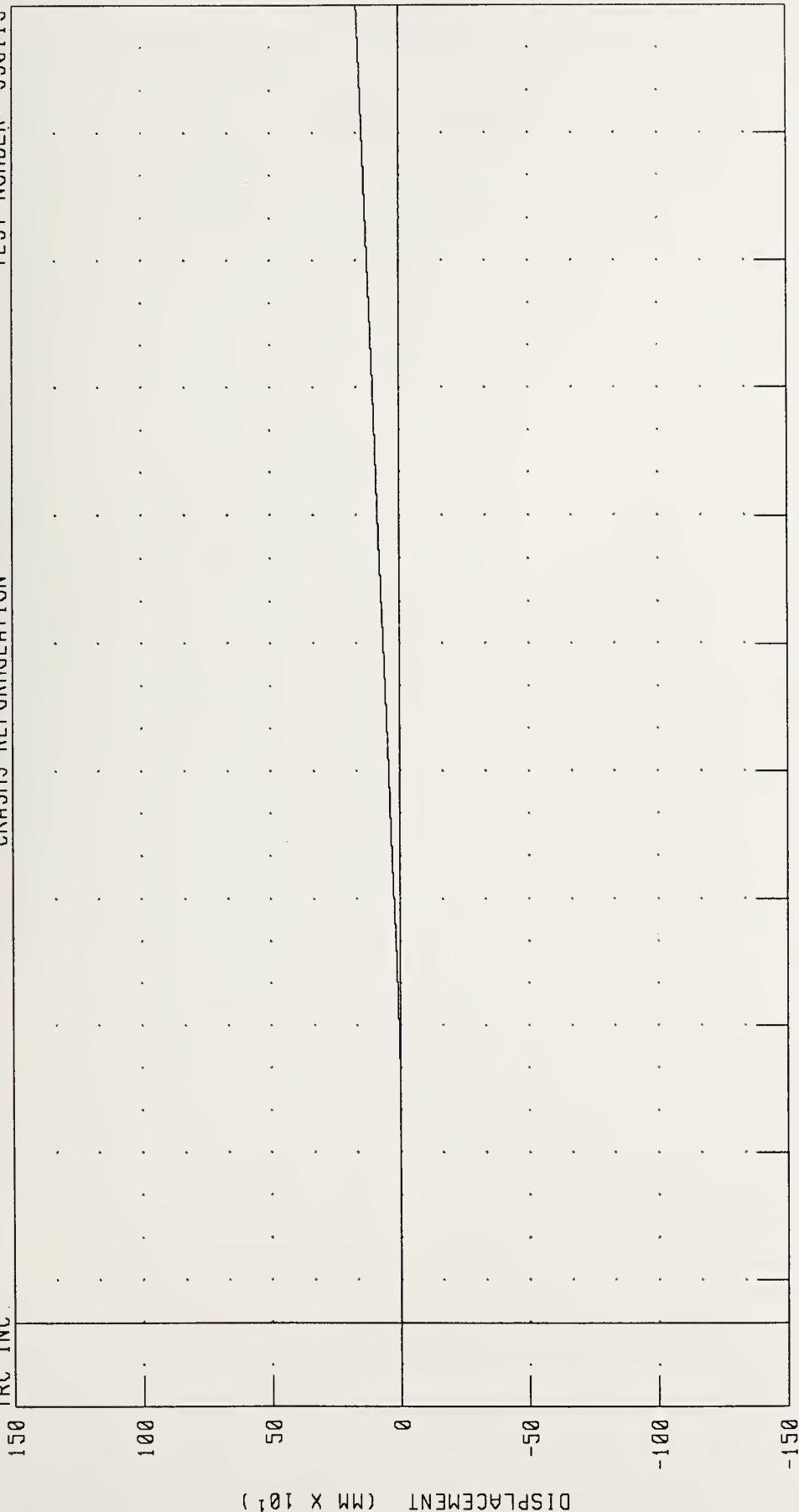
PEAK DATA: 2.67 KM/H @ 100.16 MS, -0.06 KM/H @ 37.60 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 3 OF 5
RIGHT REAR SEAT Y-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.



CHANNEL: TRRYD1 FILTER: CH. CLASS 180

PEAK DATA: 164 31 MM @ 310 00 MS, -0 35 MM @ 47 60 MS

Data Plots

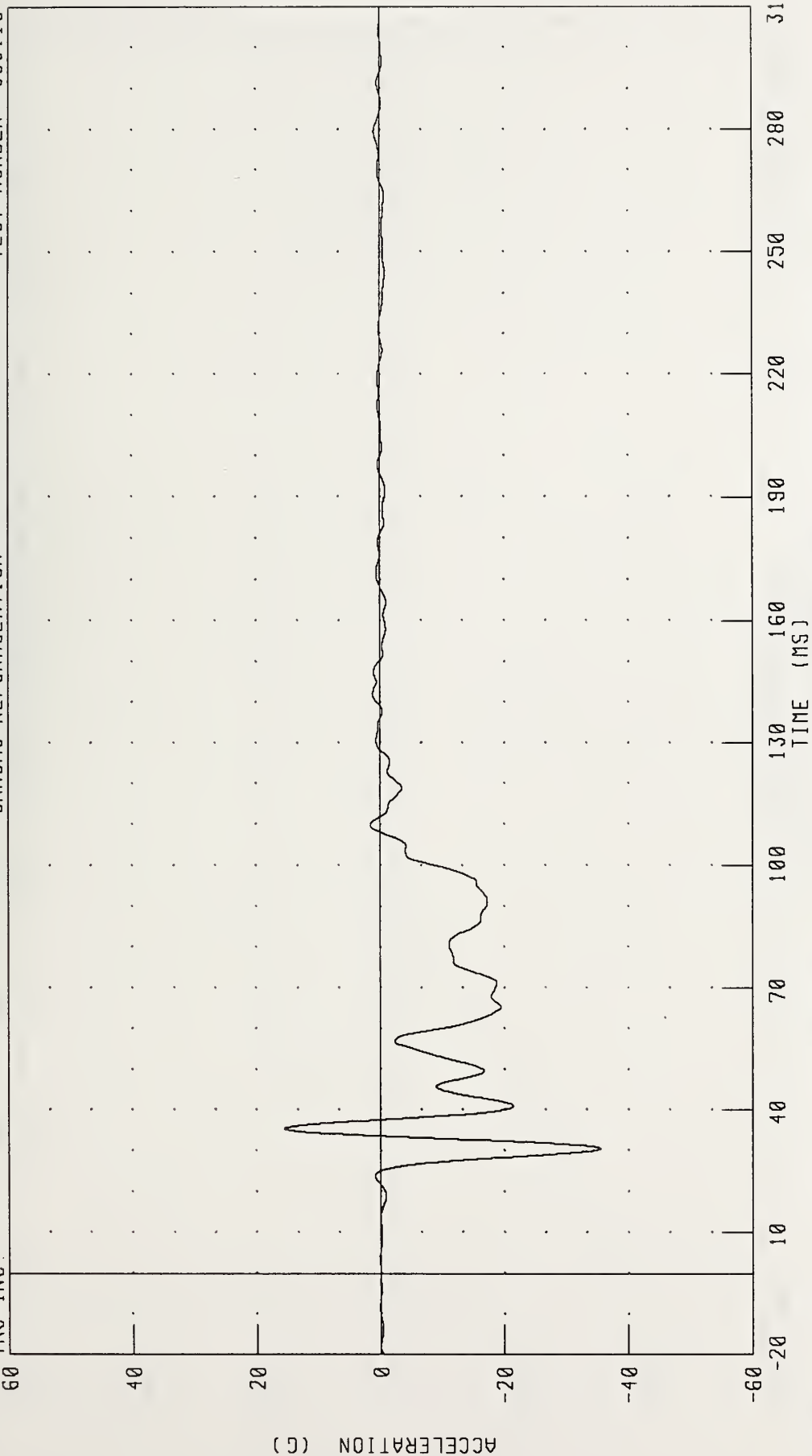
Test No. 950119-4

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
VEHICLE CG X-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC.

TEST NUMBER 950119



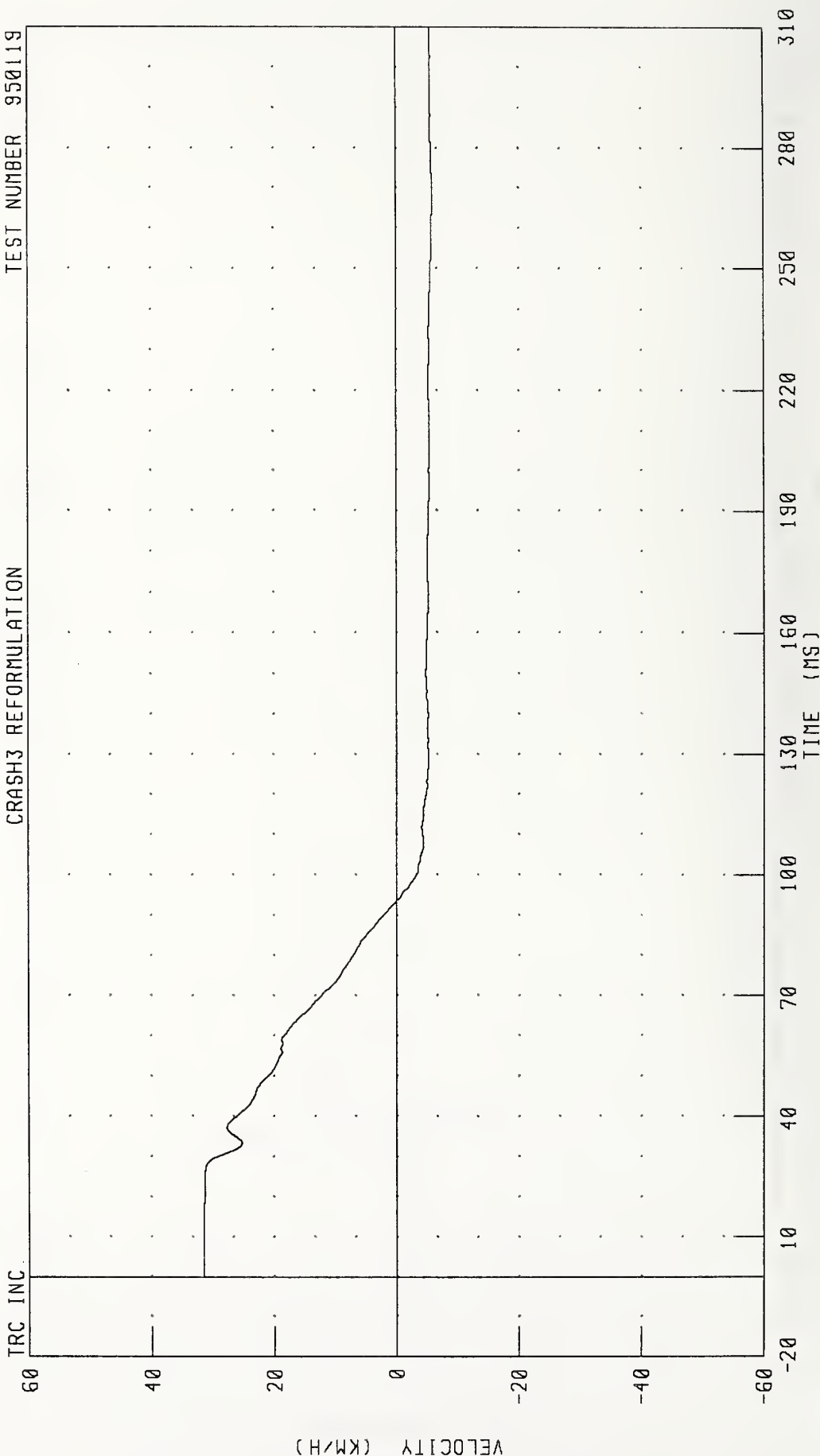
CHANNEL: VCGXG1 FILTER: CH CLASS 60

PEAK DATA: 15.57 G @ 35.36 MS, -35.47 G @ 30.48 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5

VEHICLE CG X-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119



CHANNEL: VCGXV1 FILTER: CH CLASS 180

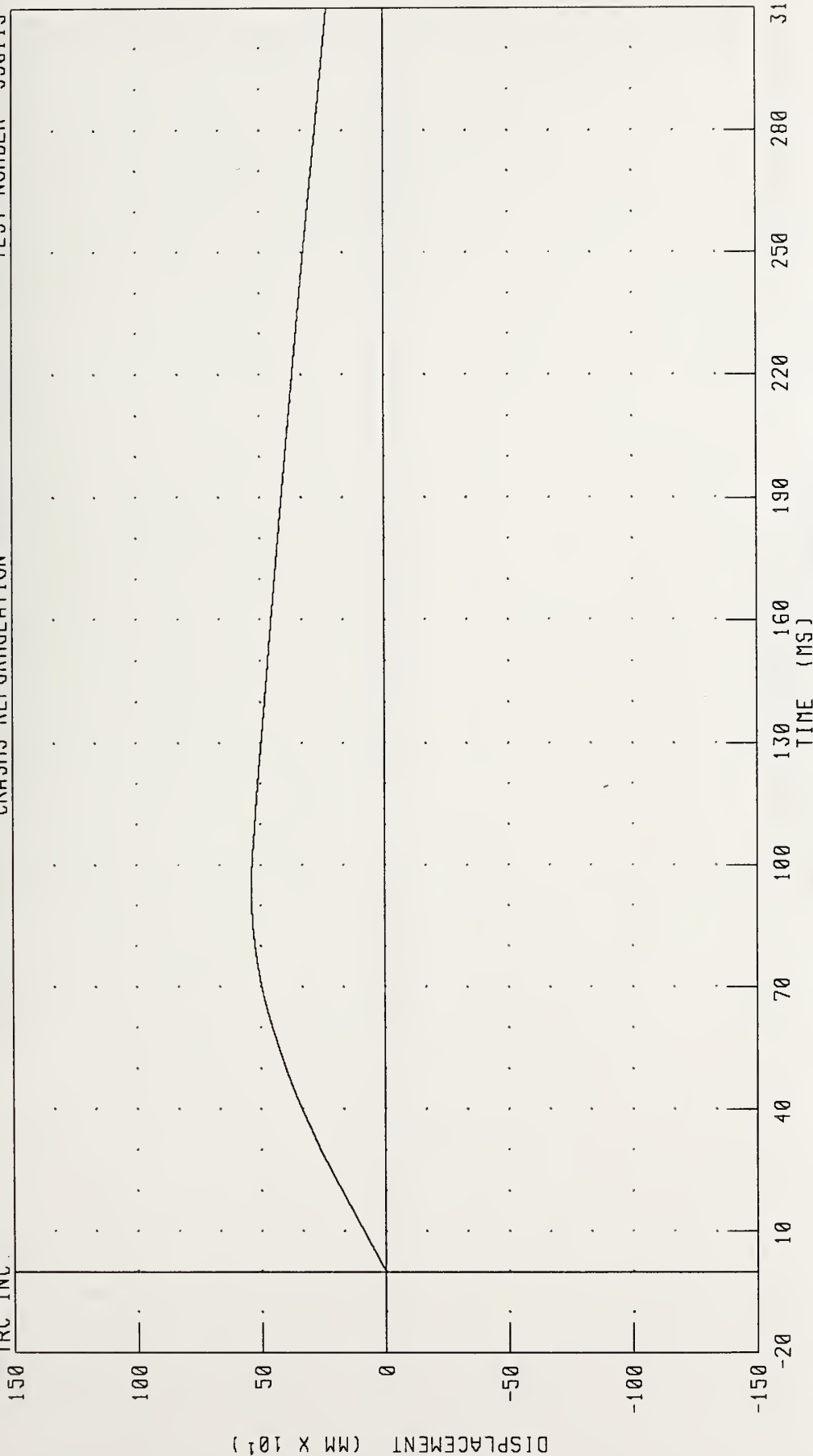
PEAK DATA: 31.52 KM/H @ 4.72 MS, -5.92 KM/H @ 266.72 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
 VEHICLE CG X-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TEST NUMBER: 950119

TRC INC.



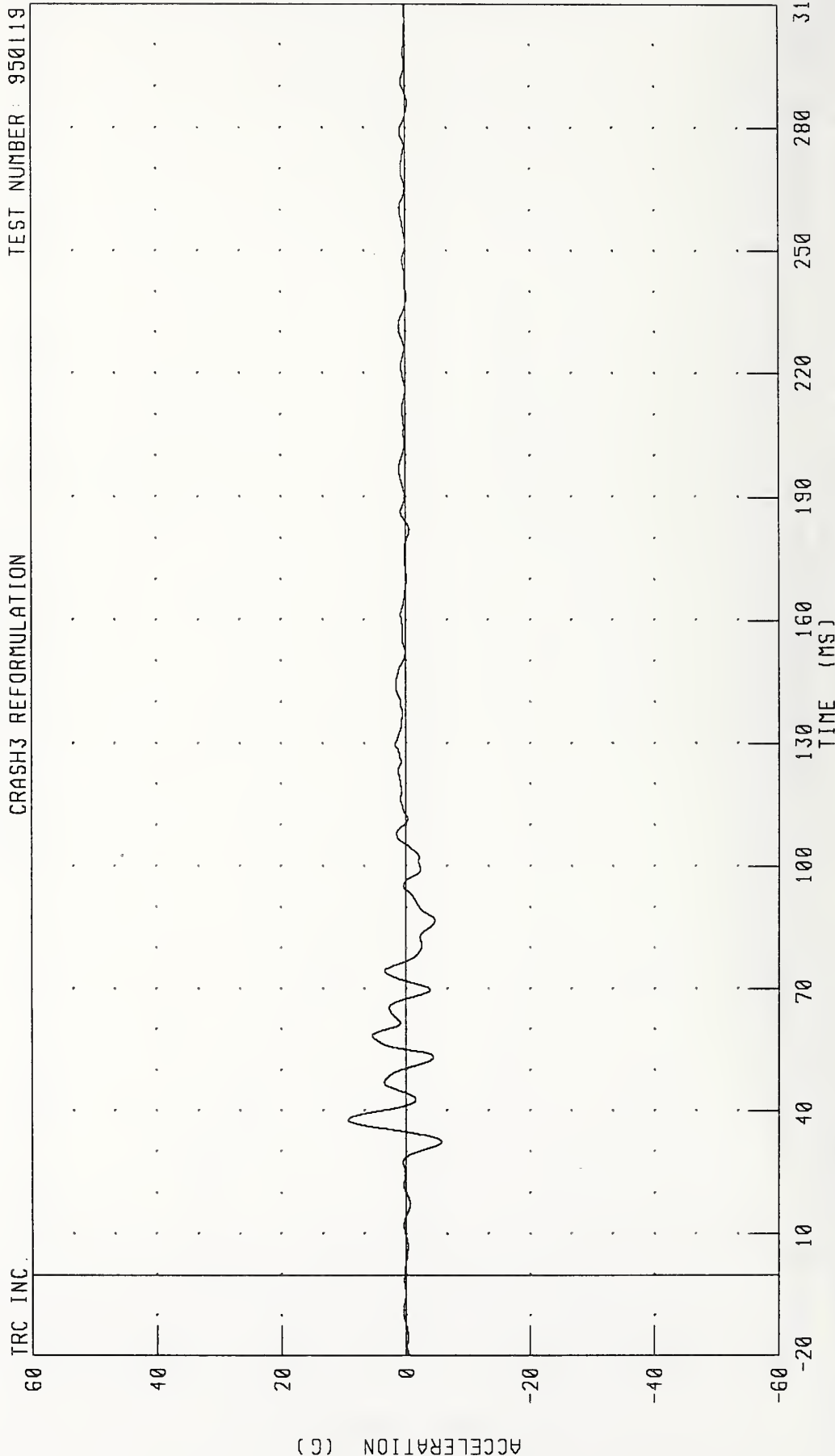
CHANNEL: VCGXD1 FILTER: CH CLASS 180

PEAK DATA: 538 60 MM @ 93 60 MS; 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
VEHICLE CG Y-AXIS ACCELERATION

TEST NUMBER: 950119

CRASH3 REFORMULATION



CHANNEL: VCGYG1 FILTER: CH. CLASS 60

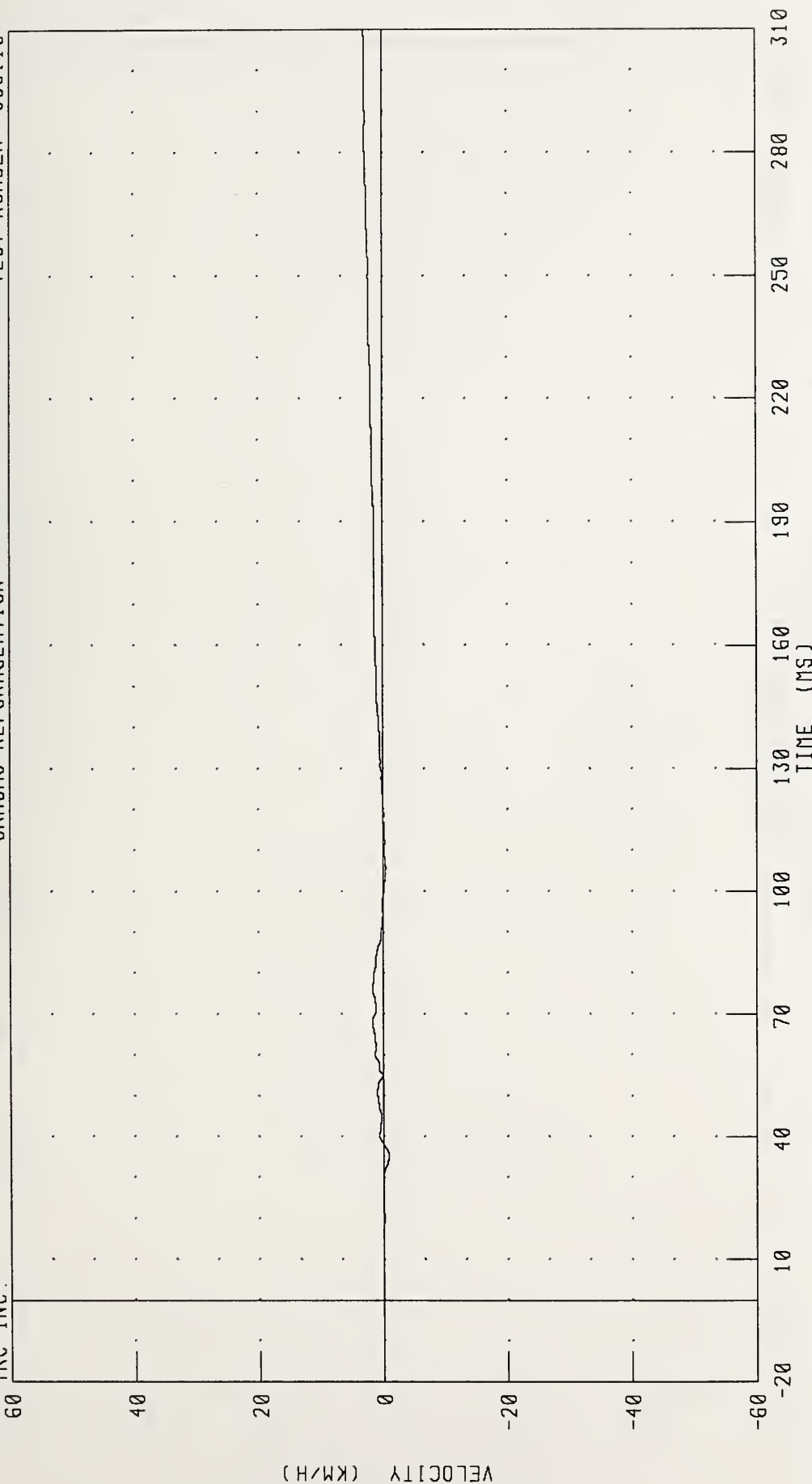
PEAK DATA: 9.30 G @ 37.84 MS, -5.73 G @ 32.48 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
VEHICLE CG Y-AXIS VELOCITY

TEST NUMBER: 950119

CRASH3 REFORMULATION

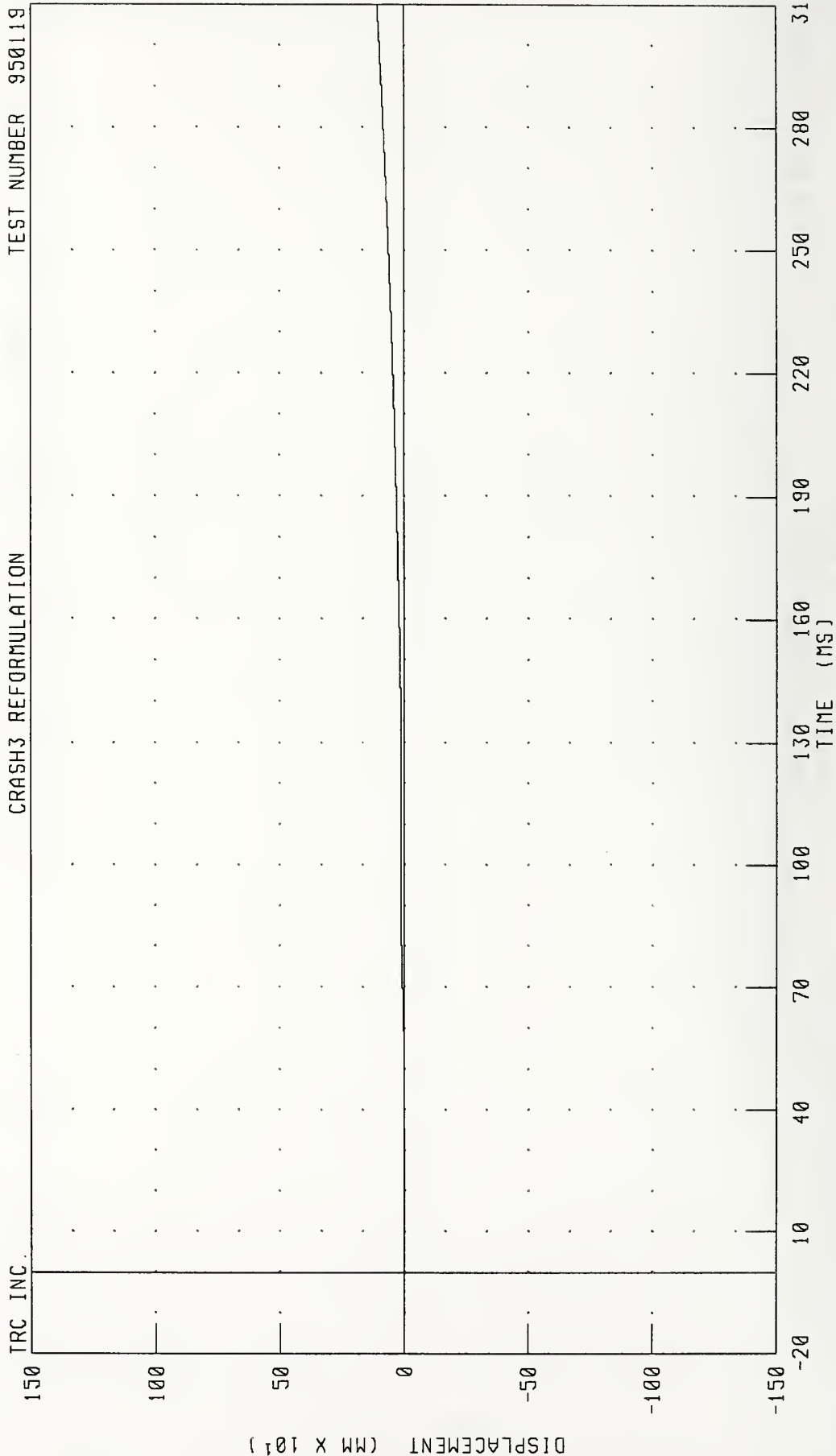
TRC INC.



PEAK DATA: 3 02 KM/H @ 310 00 MS, -0 87 KM/H @ 35 12 MS

CHANNEL: VCGYV1 FILTER: CH CLASS 180

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
VEHICLE CG Y-AXIS DISPLACEMENT



CHANNEL: VCGYD1 FILTER: CH CLASS 180

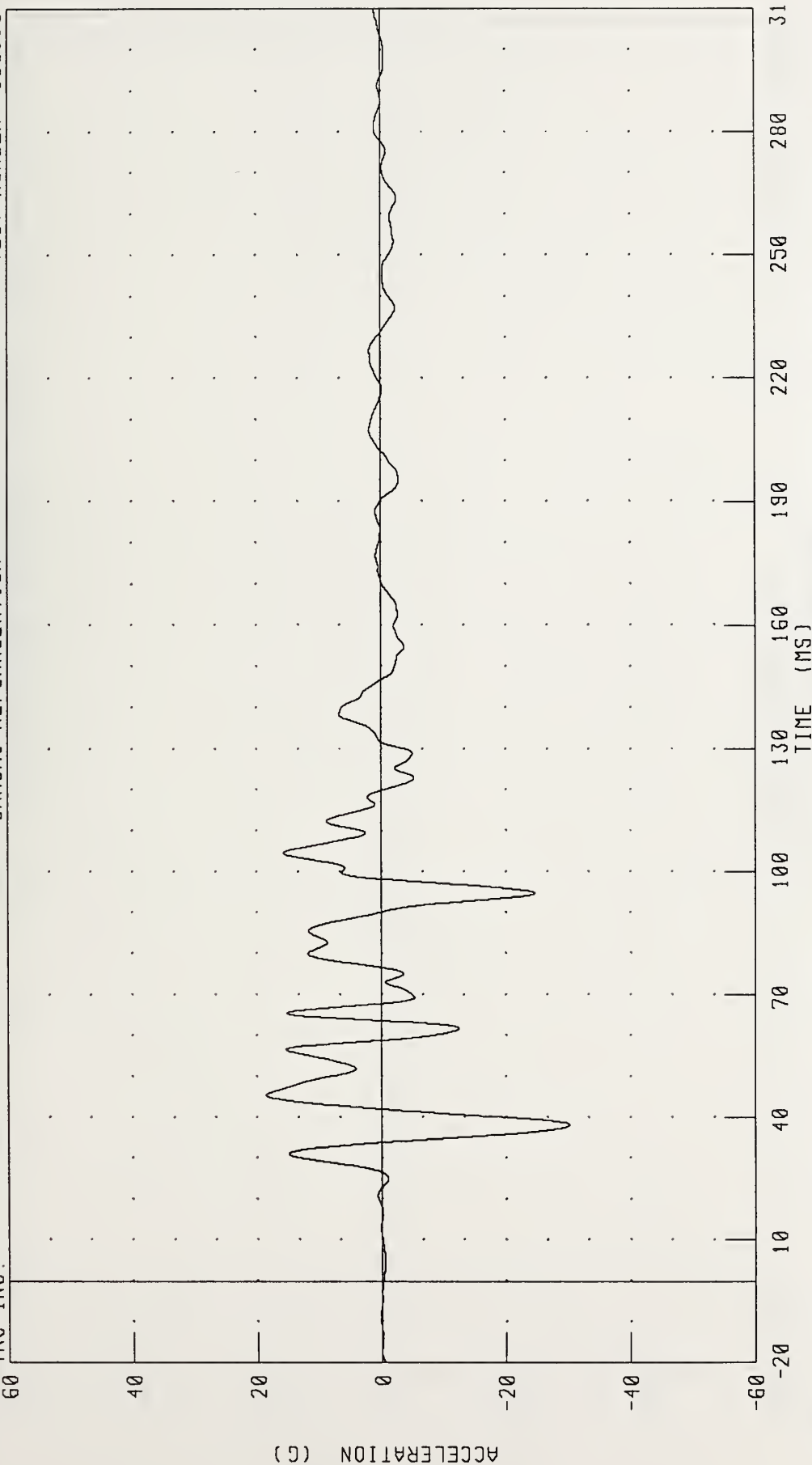
PEAK DATA: 107.27 MM @ 310.00 MS, -1.21 MM @ 38.08 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
VEHICLE CG Z-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119

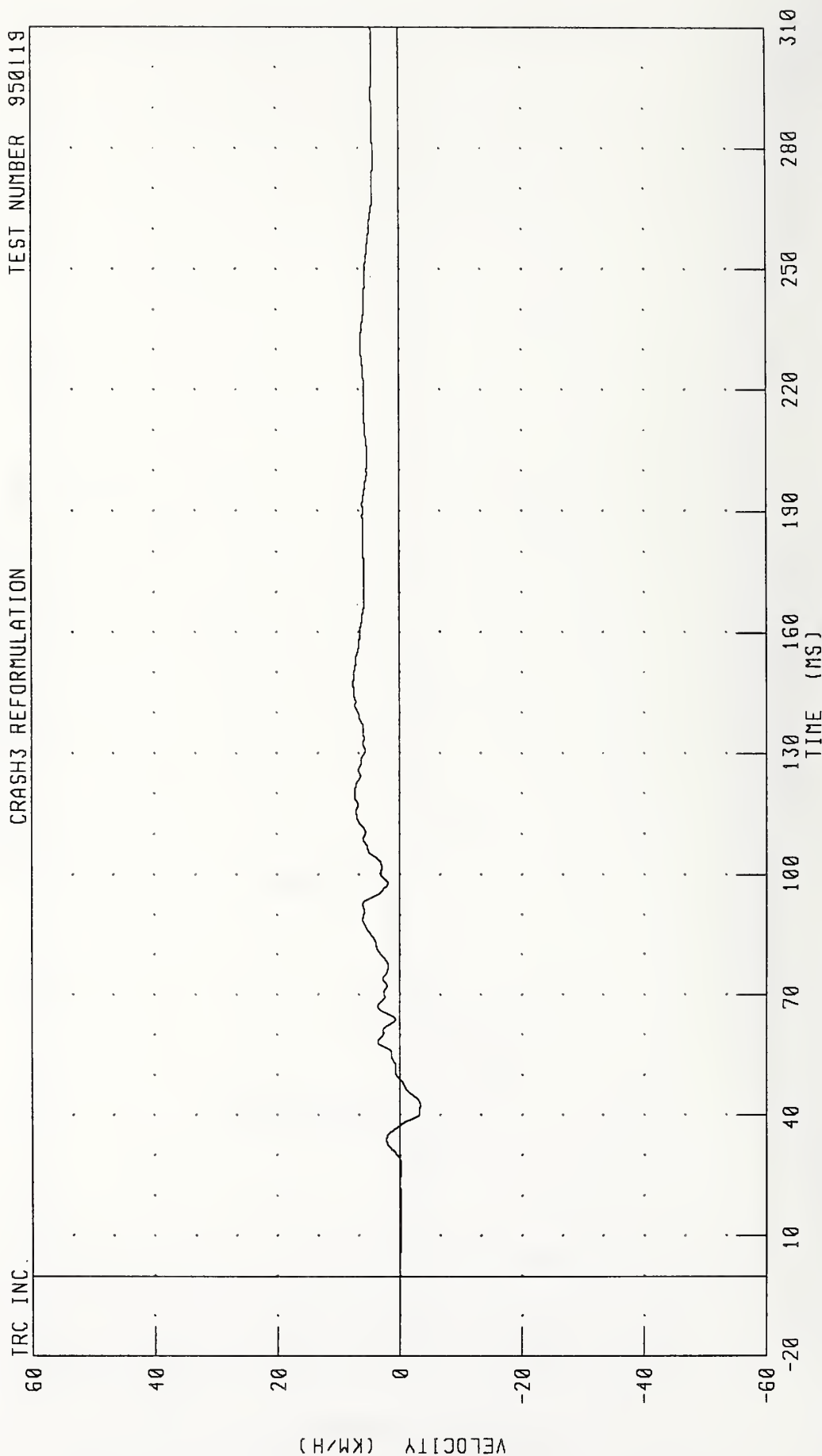
TRC INC.



CHANNEL VCGZG1 FILTER CH CLASS 60

PEAK DATA: 18 59 G @ 45 44 MS, -30 22 G @ 38 16 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
VEHICLE CG Z-AXIS VELOCITY



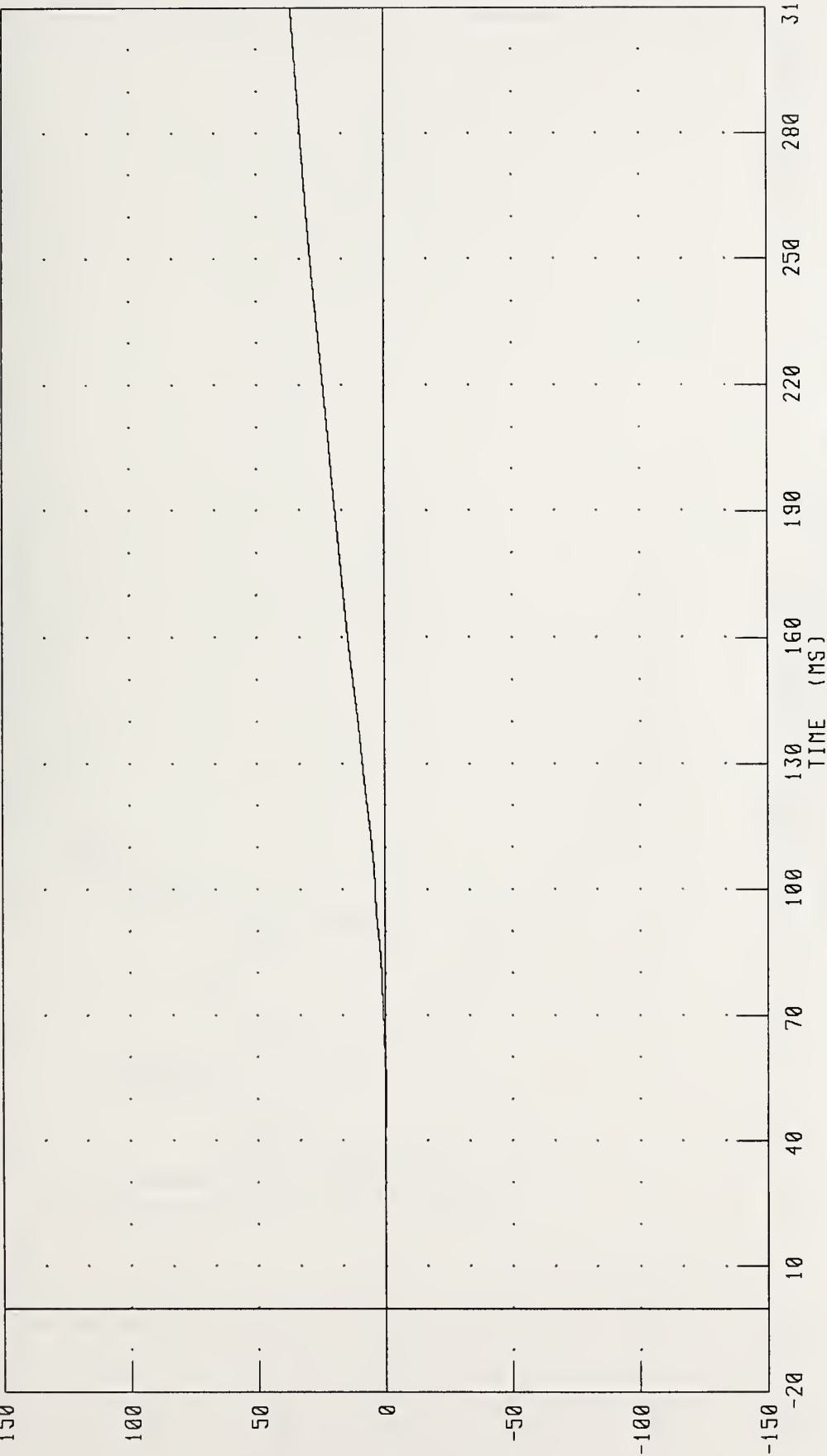
CHANNEL: VCGZV1 FILTER: CH CLASS 180 PEAK DATA: 7.61 KM/H @ 147 28 MS, -3.35 KM/H @ 42 64 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
 VEHICLE CG Z-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.

DISPLACEMENT (MM X 10¹)



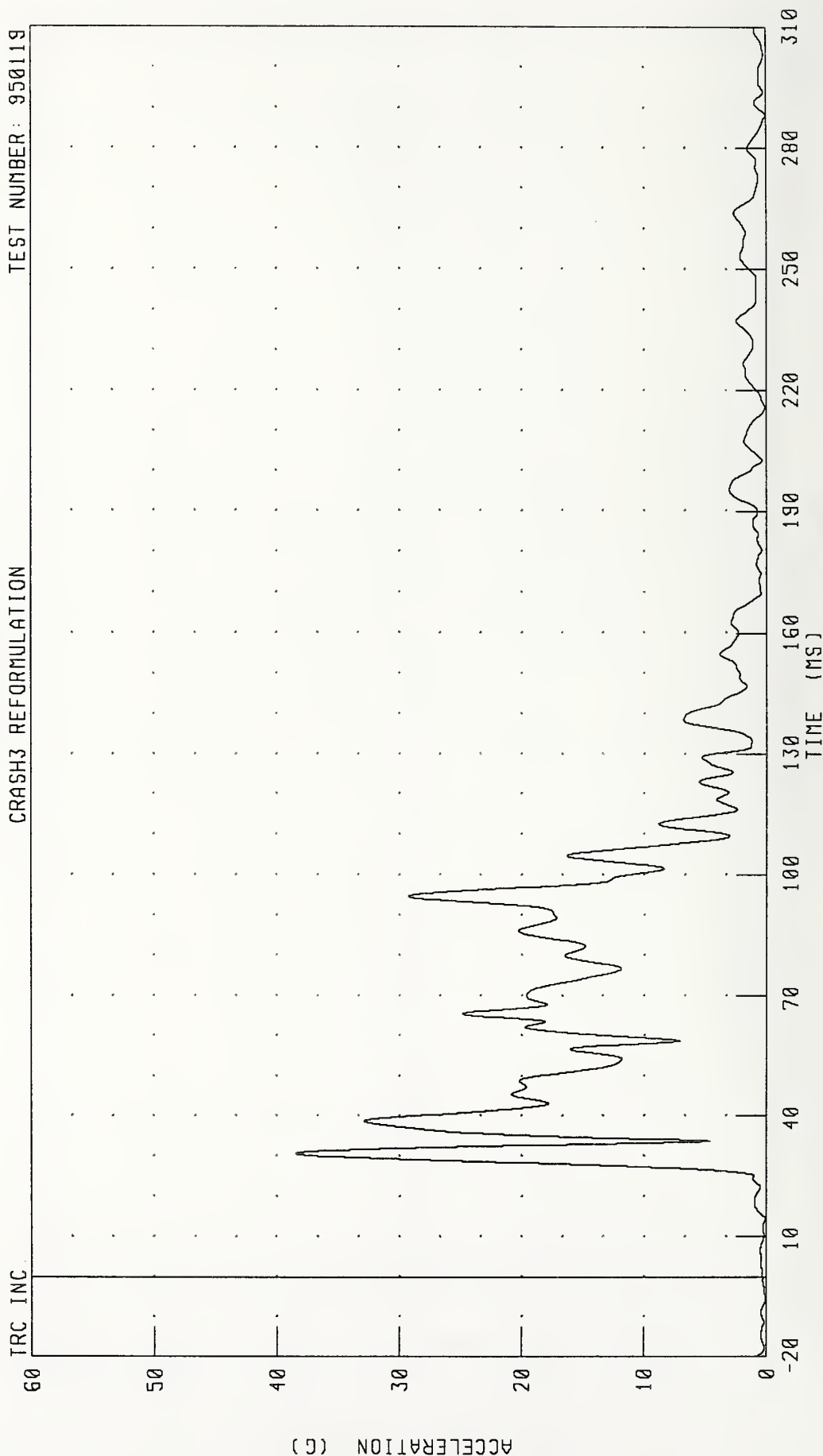
CHANNEL VCGZD1 FILTER CH CLASS 180

PEAK DATA: 365.15 MM @ 310 00 MS, -4.22 MM @ 48 96 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
VEHICLE CG RESULTANT ACCELERATION

TEST NUMBER: 950119

CRASH3 REFORMULATION



CHANNEL: VCGRG1 FILTER: CH. CLASS 60

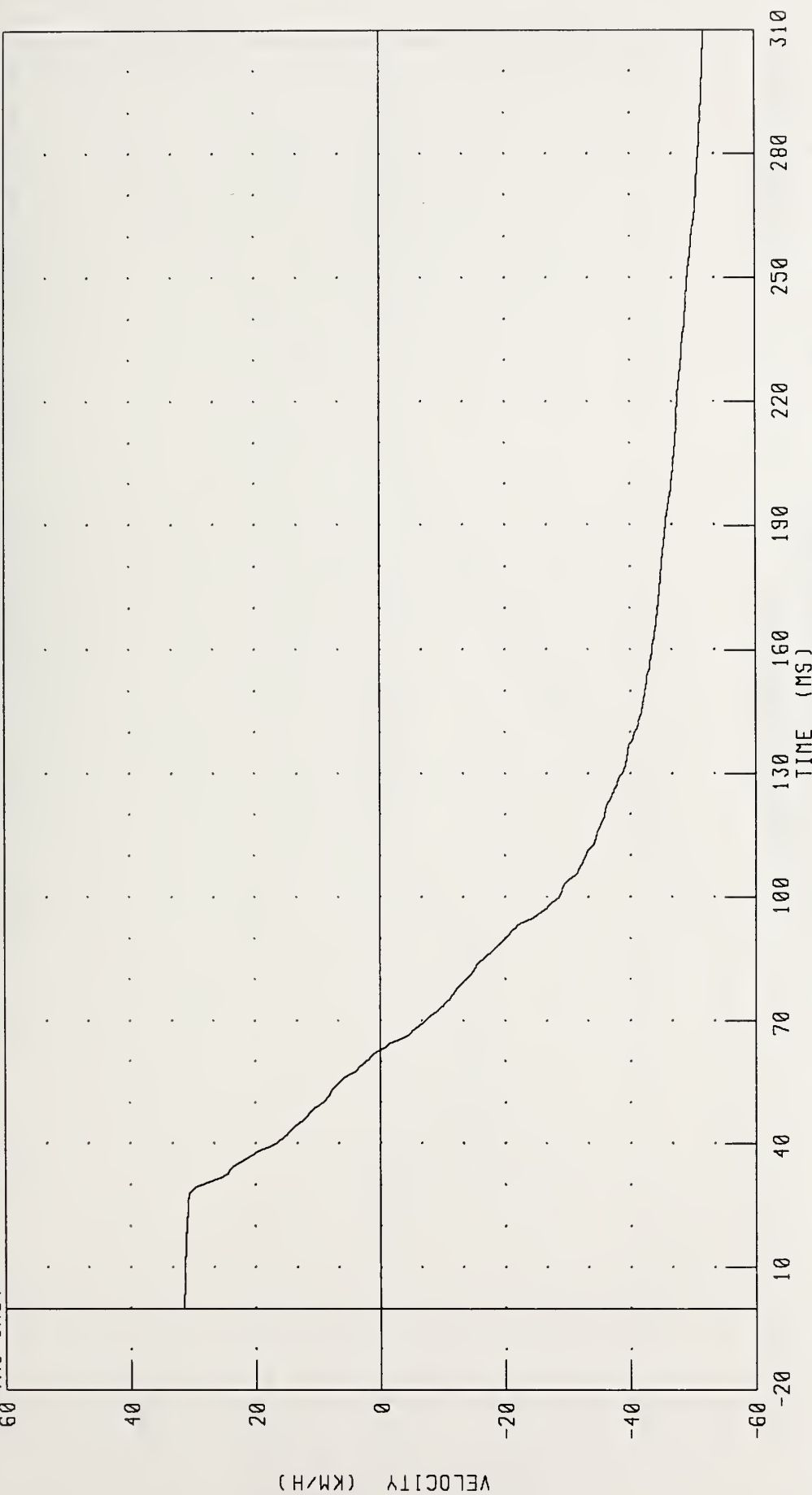
PEAK DATA: 38 44 G @ 30.64 MS, 0 05 G @ 14 24 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
VEHICLE CG RESULTANT VELOCITY

TEST NUMBER: 950119

CRASH3 REFORMULATION

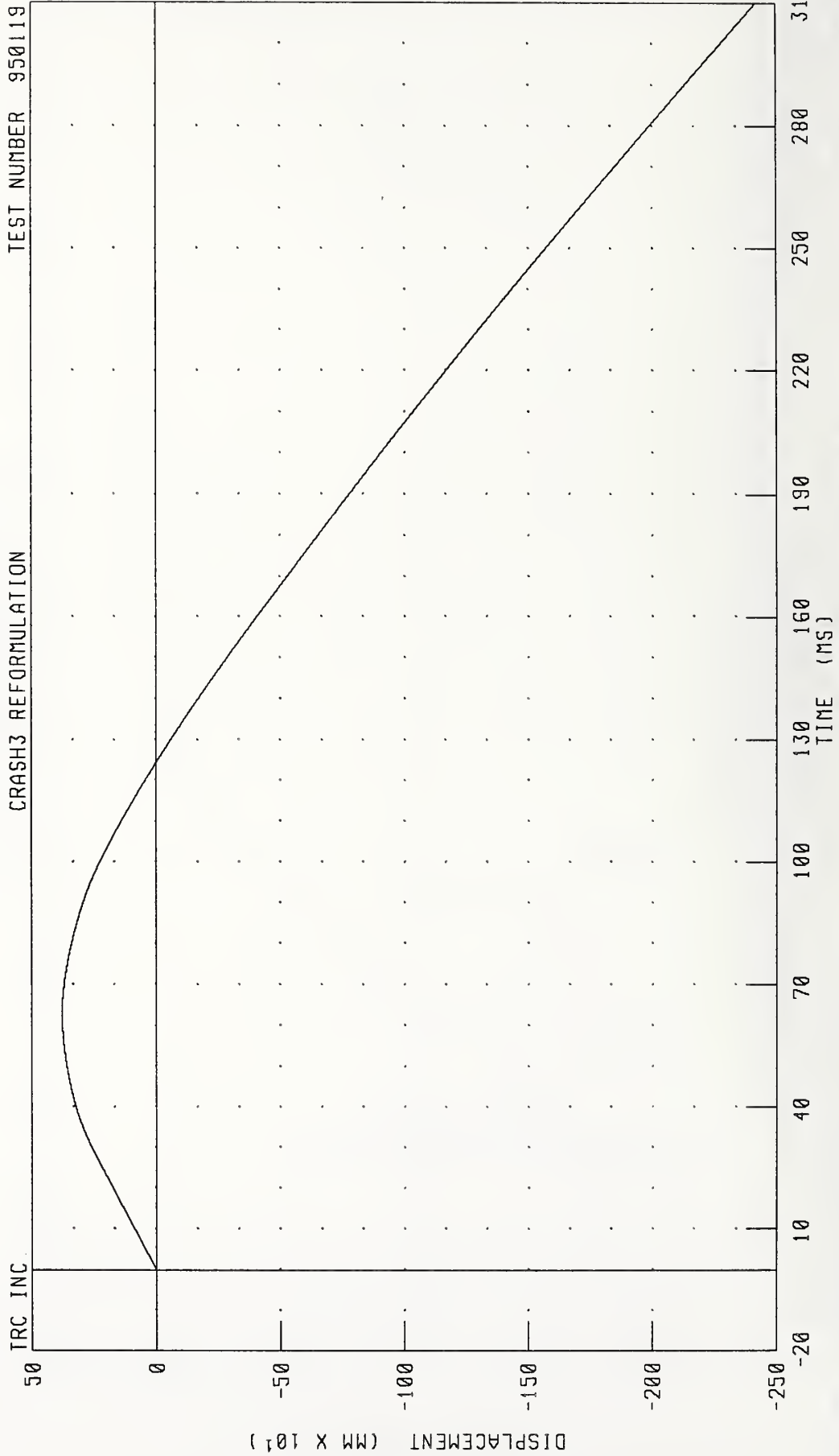
TRC INC.



PEAK DATA: 31.50 KM/H @ 0.00 MS; -51.90 KM/H @ 310.00 MS

CHANNEL: VCGRV1 FILTER: CH. CLASS 180

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
 VEHICLE CG RESULTANT DISPLACEMENT



CHANNEL: VCGRD1 FILTER: CH CLASS 180

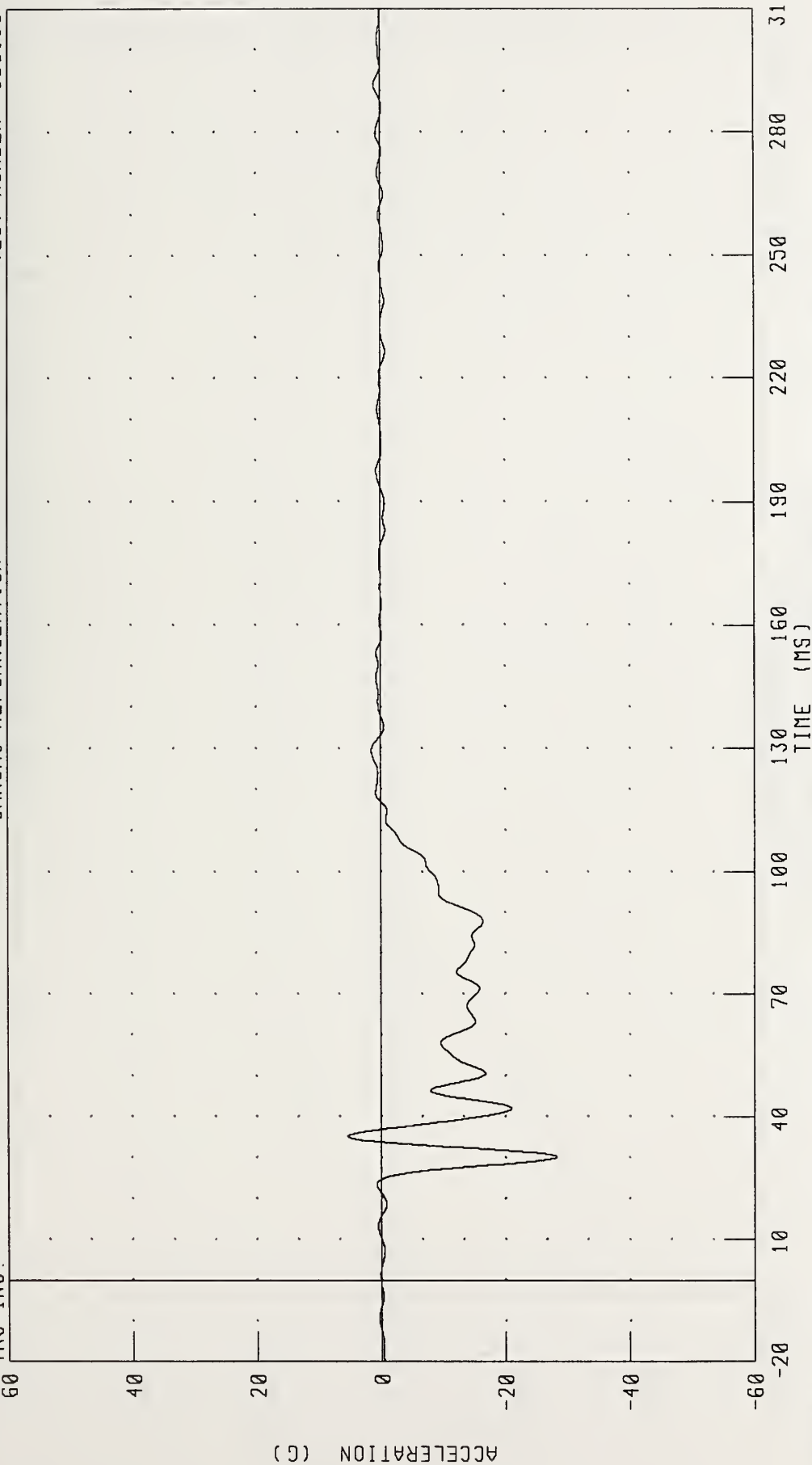
PEAK DATA: 376.28 MM @ 62.80 MS, -2416.99 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
LEFT FRONT SILL X-AXIS ACCELERATION

TEST NUMBER: 950119

CRASH3 REFORMULATION

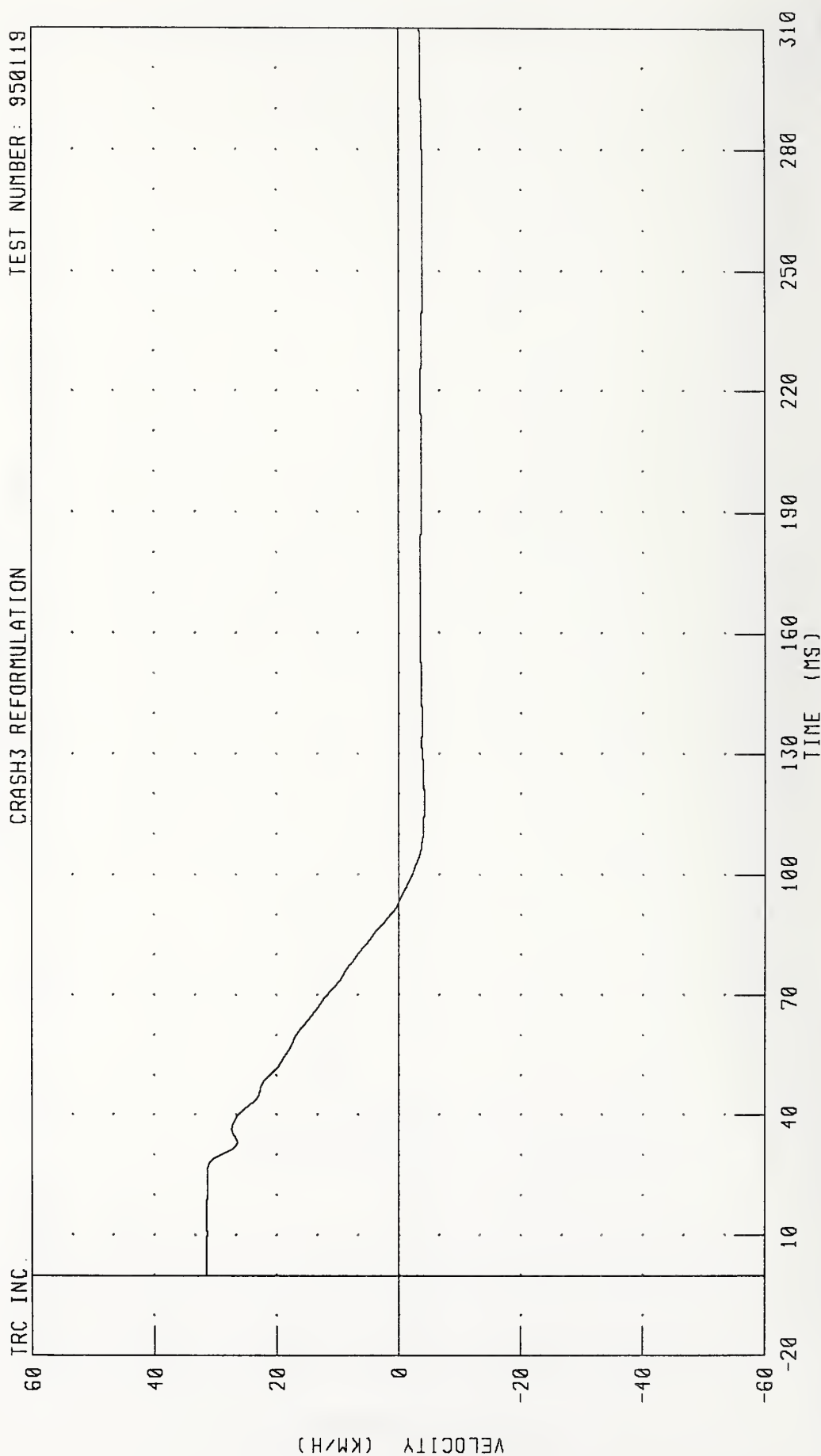
TRC INC.



CHANNEL: LFSXG1 FILTER: CH CLASS 60

PEAK DATA: 5.37 G @ 35.20 MS, -28.34 G @ 30.24 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
LEFT FRONT SILL X-AXIS VELOCITY



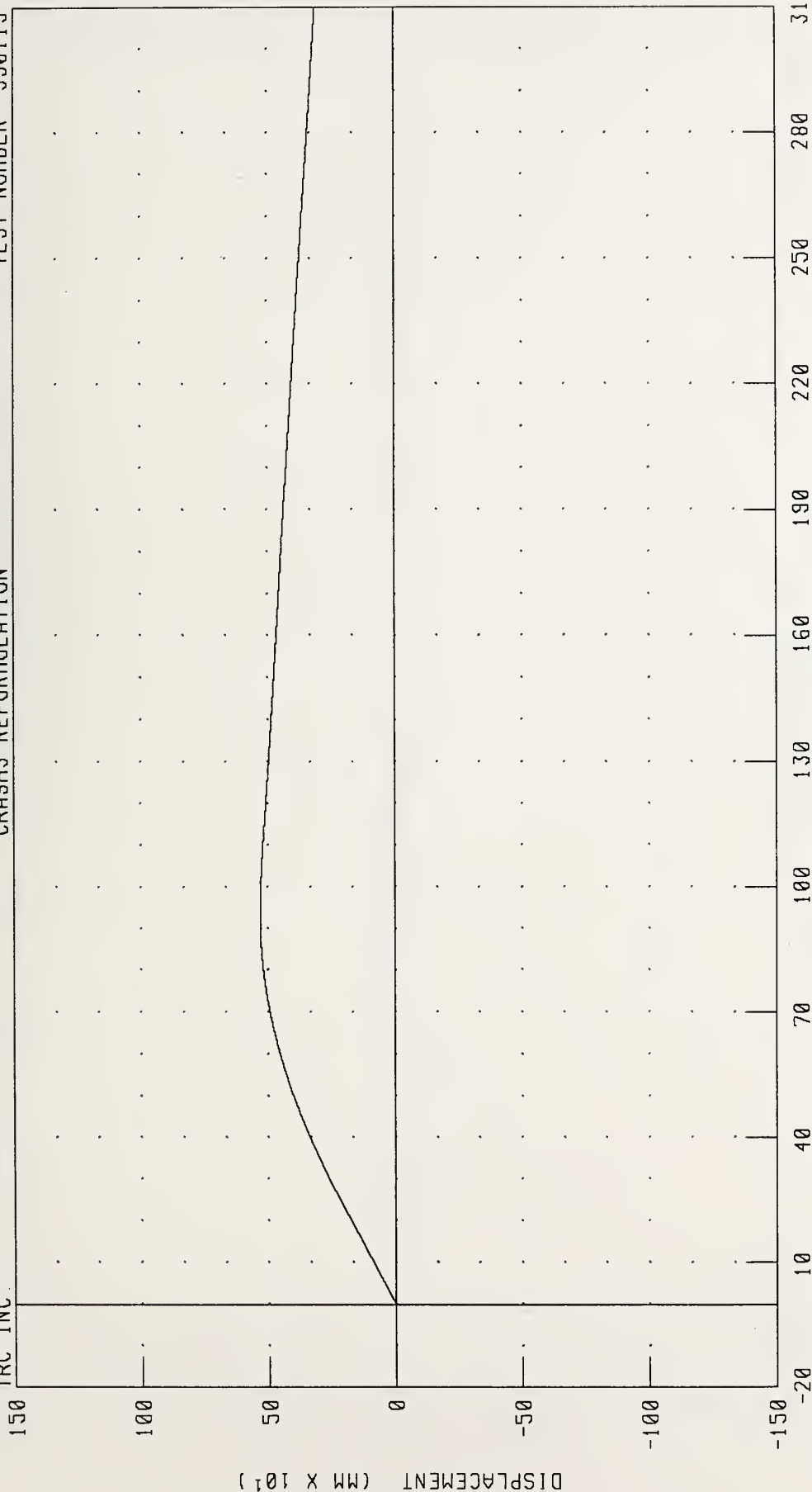
CHANNEL: LFSXV1 FILTER: CH. CLASS 180

PEAK DATA: 31.51 KM/H @ 2.48 MS; -4 28 KM/H @ 116 88 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
LEFT FRONT SILL X-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER 950119

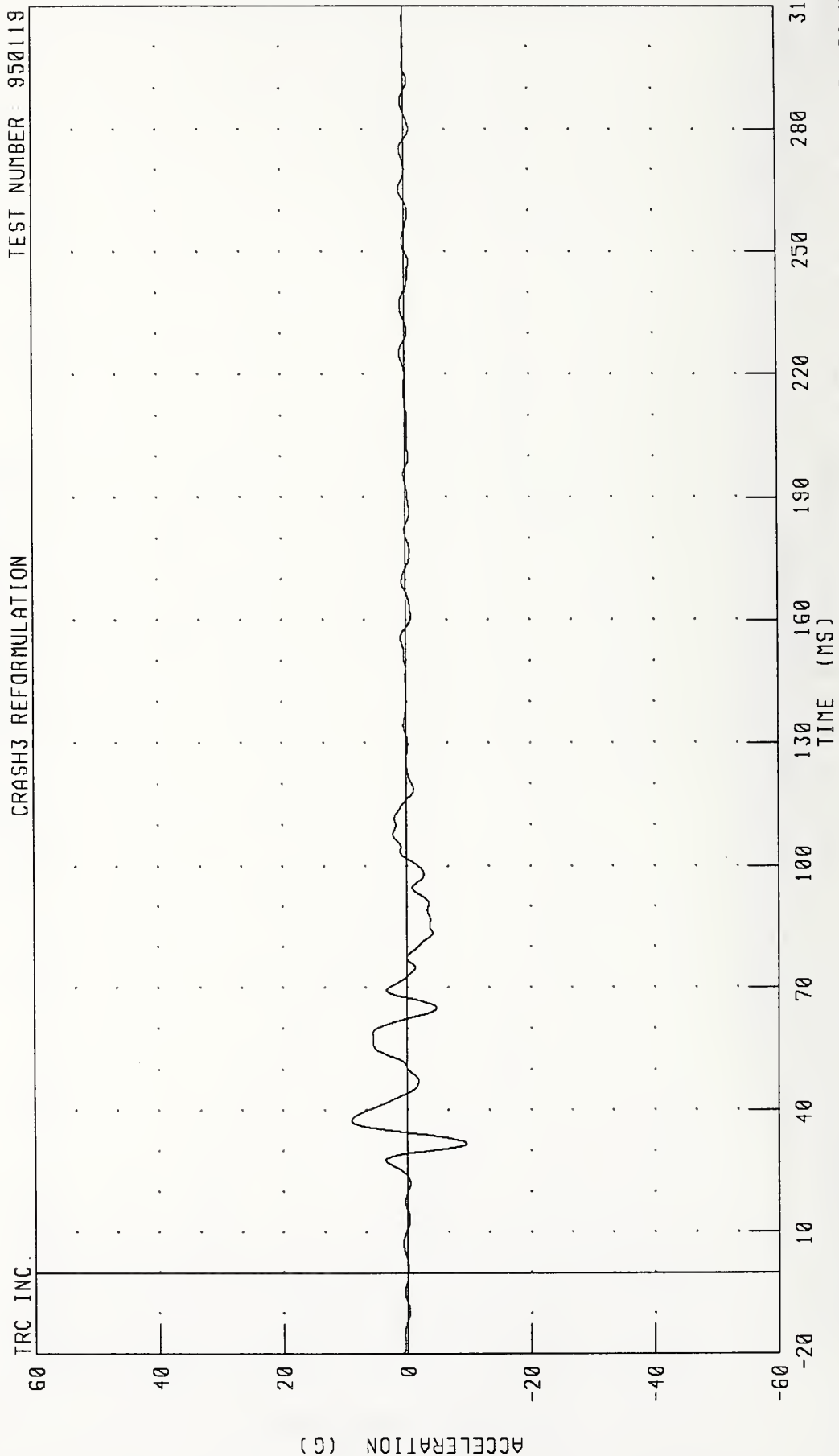
TRC INC.



CHANNEL: LFSXD1 FILTER: CH CLASS 180

PEAK DATA: 531.15 MM @ 93.20 MS, 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
LEFT FRONT SILL Y-AXIS ACCELERATION



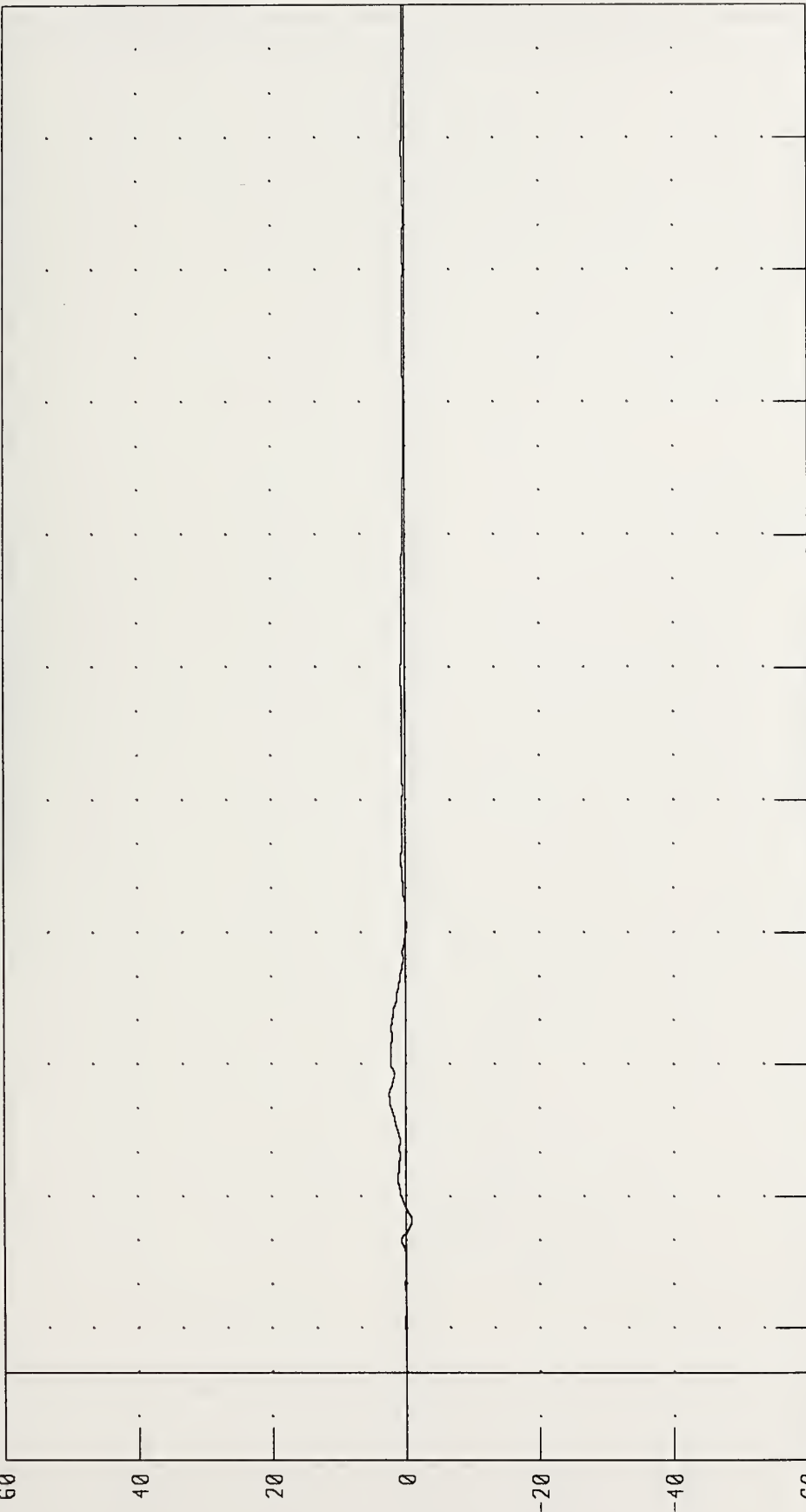
CHANNEL: LFSYG1 FILTER: CH CLASS 60 PEAK DATA: 9.05 G @ 37.52 MS, -9.56 G @ 31.92 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
LEFT FRONT SILL Y-AXIS VELOCITY

TEST NUMBER 950119

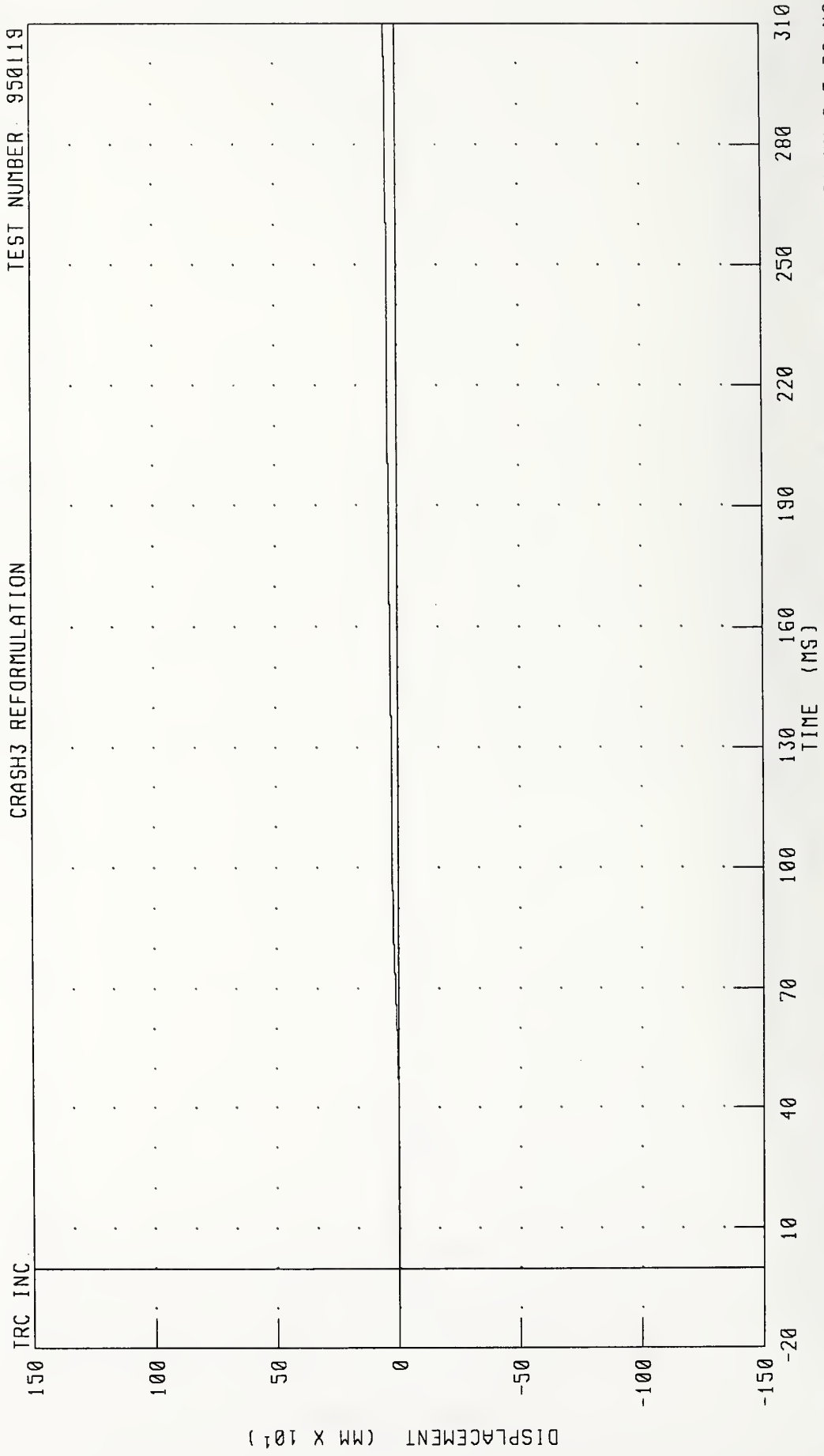
CRASH3 REFORMULATION

TRC INC.



CHANNEL LFSYV1 FILTER: CH CLASS 180
PEAK DATA: 2.51 KM/H @ 63.04 MS; -0.87 KM/H @ 34.56 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
LEFT FRONT SILL Y-AXIS DISPLACEMENT



1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
RIGHT FRONT SILL X-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC.

60

40

20

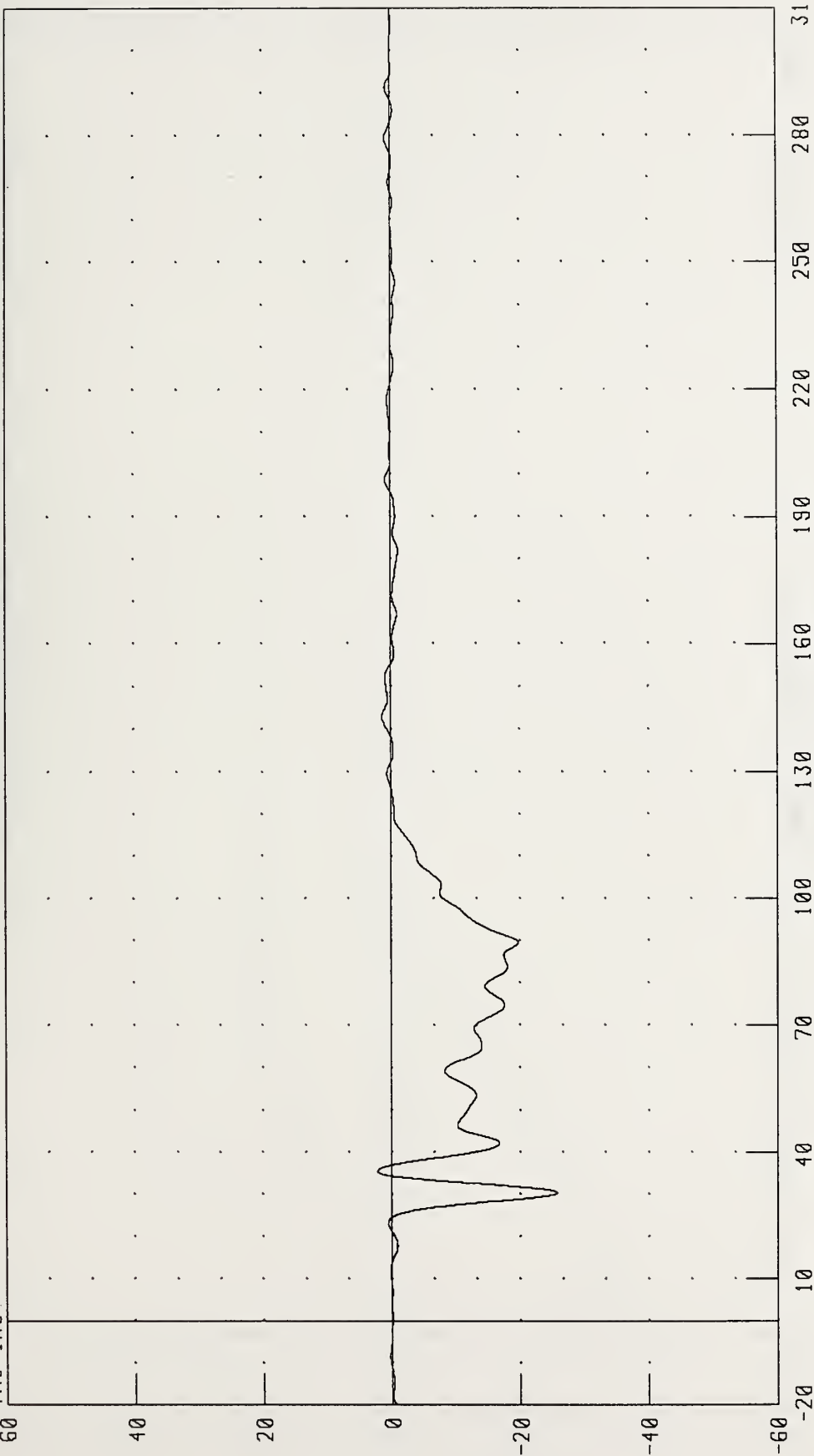
0

-20

-40

-60

ACCELERATION (G)



TIME (MS)

310 280 250 220 190 160 130 100 70 40 10 -20

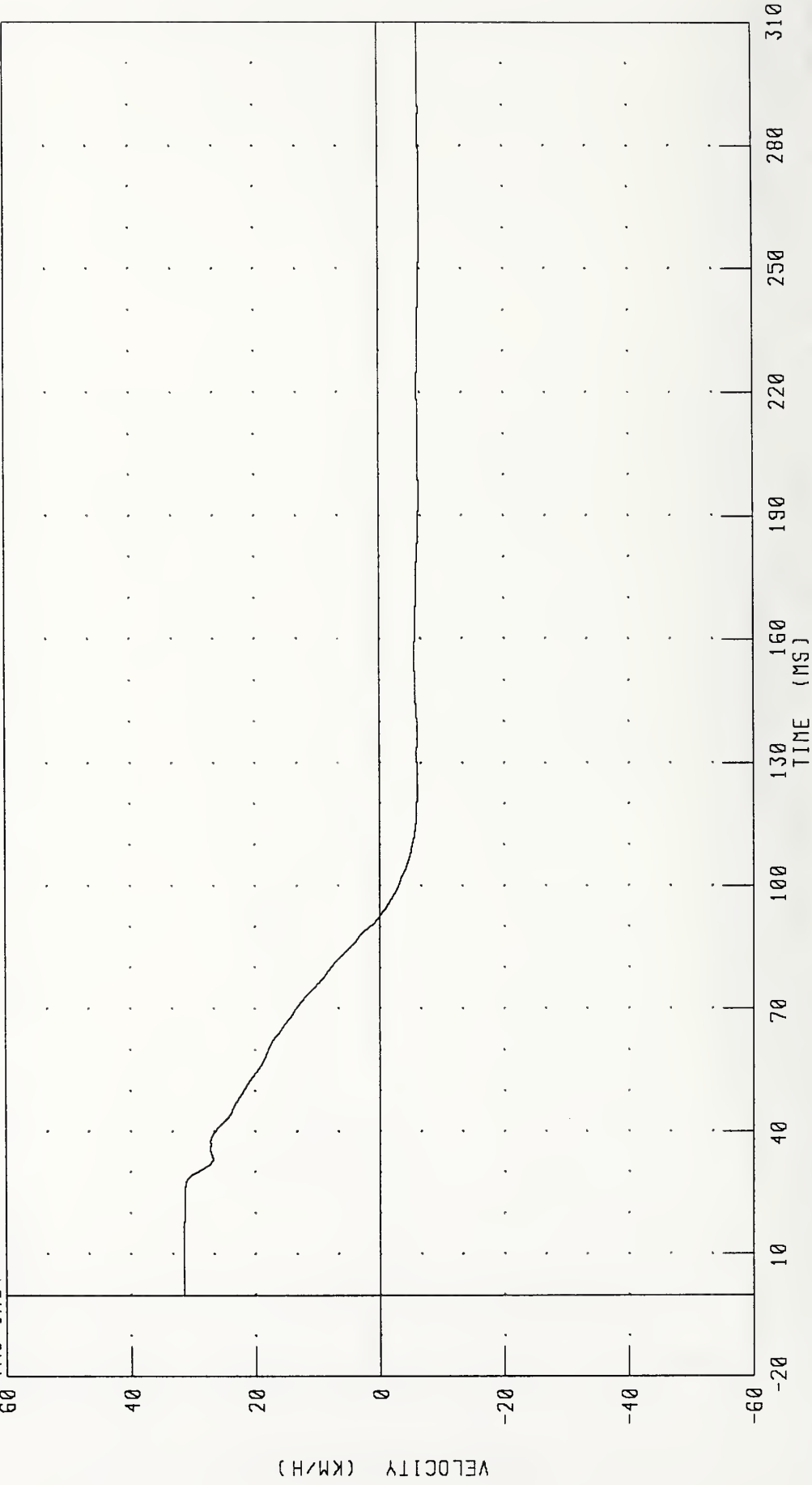
CHANNEL RFSXG1 FILTER CH CLASS 60 PEAK DATA: 2 27 G @ 35 52 MS, -25 84 G @ 30 32 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
 RIGHT FRONT SILL X-AXIS VELOCITY

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL: RFSXV1 FILTER: CH CLASS 180

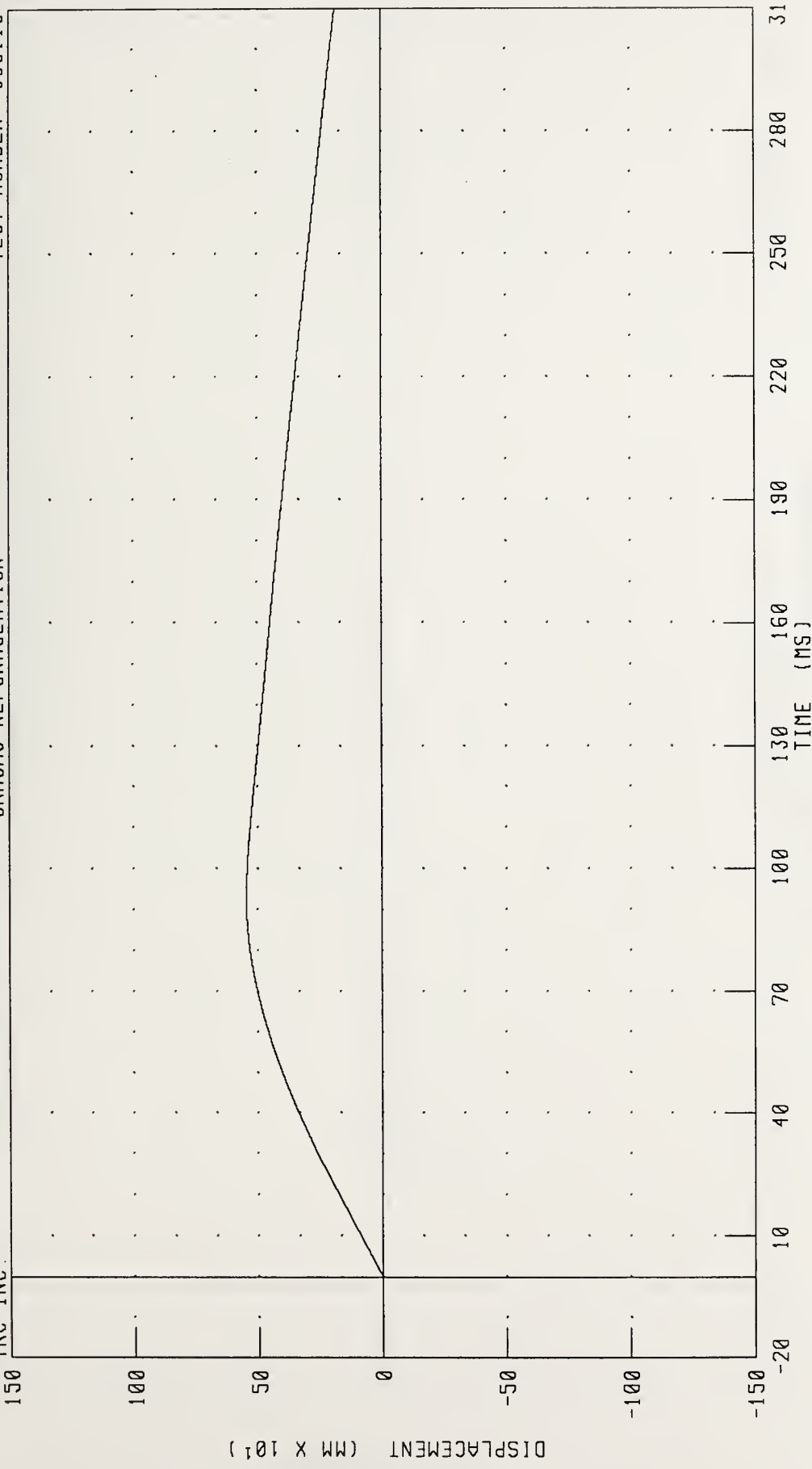
PEAK DATA: 31.51 KM/H @ 14.80 MS, -6.61 KM/H @ 266.88 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
RIGHT FRONT SILL X-AXIS DISPLACEMENT

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC.



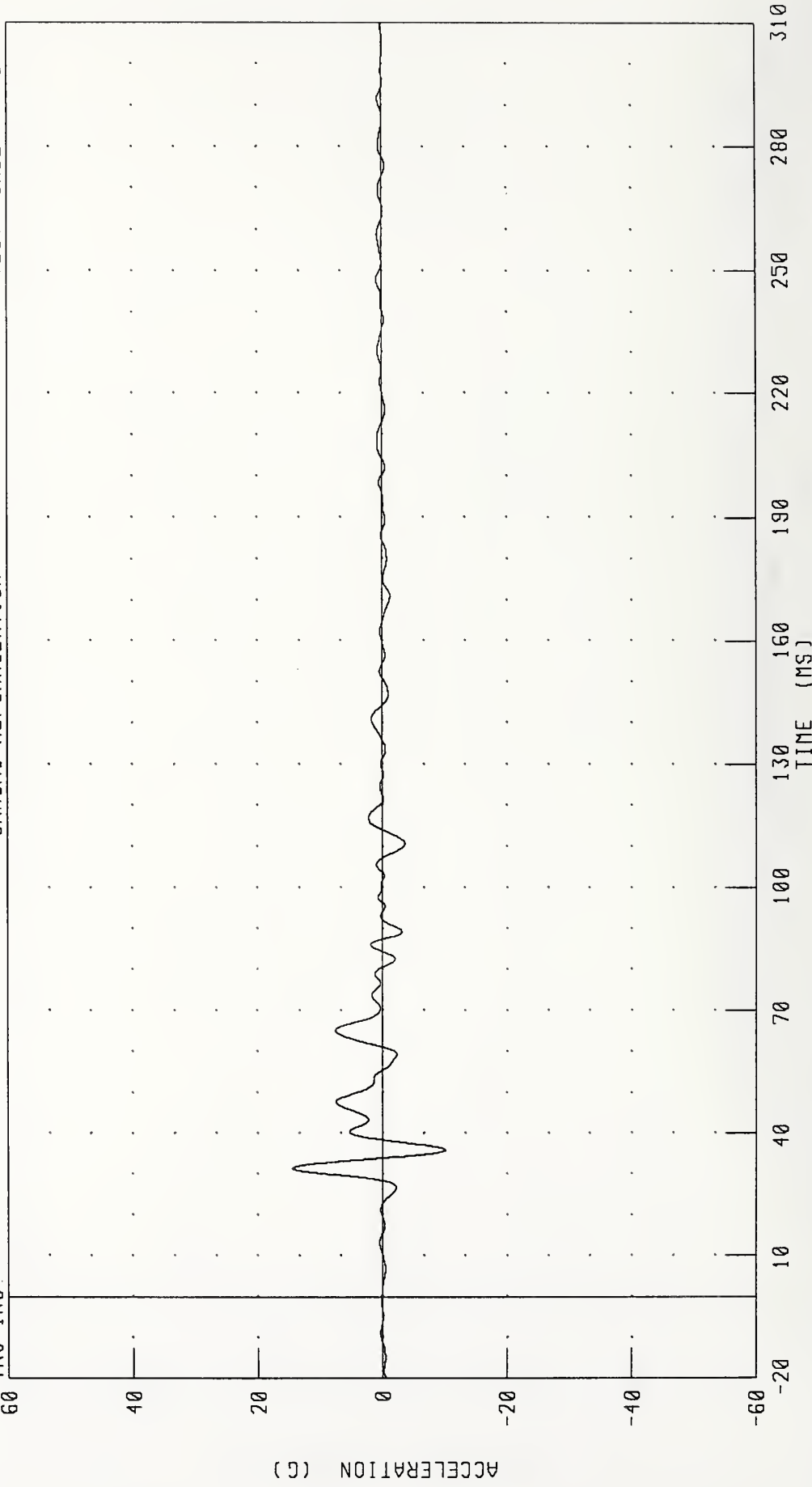
CHANNEL: RFSXD1 FILTER: CH CLASS 180 PEAK DATA 546 43 MM @ 92.64 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
RIGHT FRONT SILL Y-AXIS ACCELERATION

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL: RFSYG1 FILTER: CH. CLASS 60

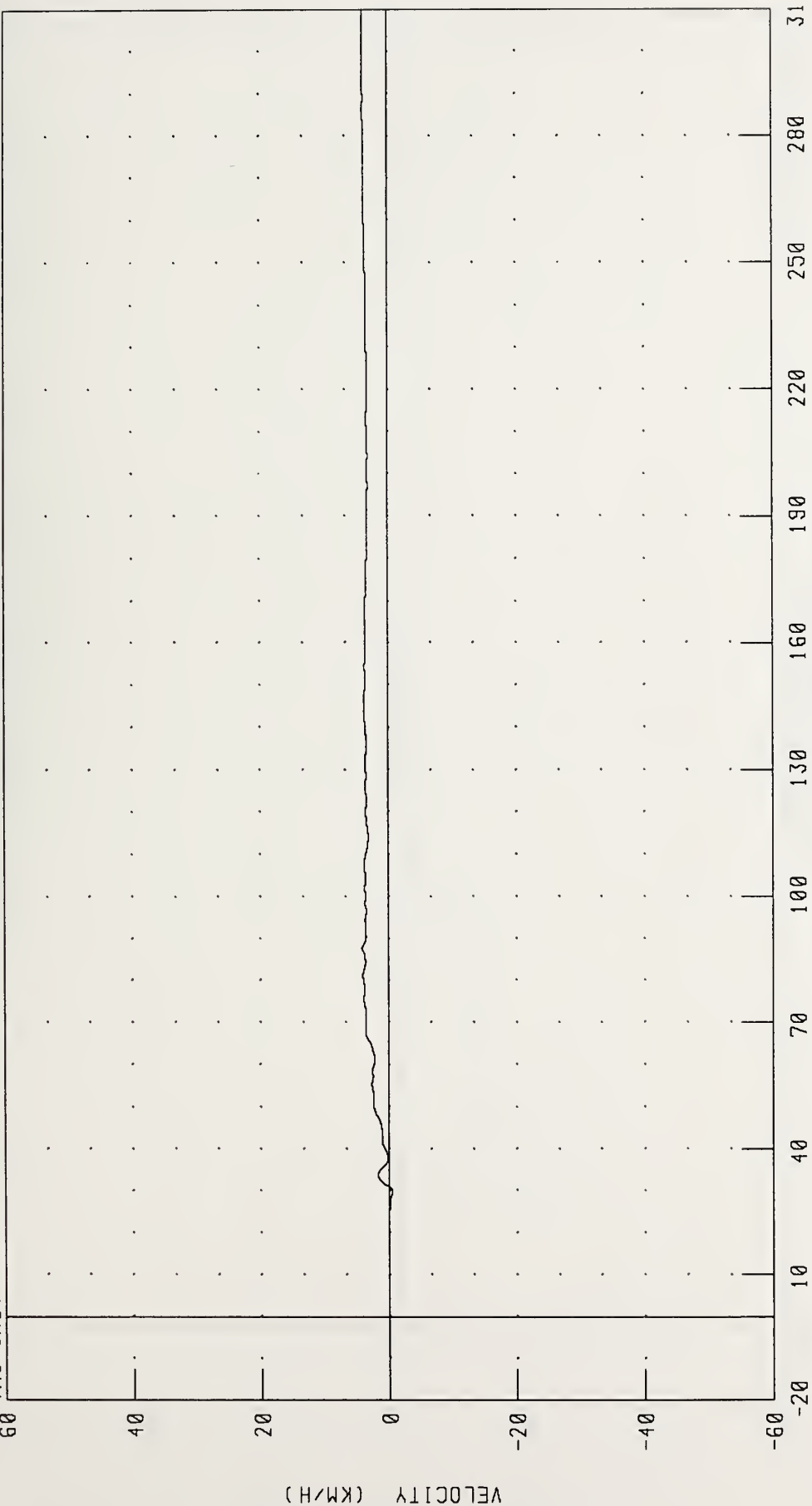
PEAK DATA: 14.52 G @ 31.44 MS, -10.08 G @ 35.92 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
RIGHT FRONT SILL Y-AXIS VELOCITY

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL: RFSYV1 FILTER: CH. CLASS 180

PEAK DATA: 4.17 KM/H @ 87.60 MS, -0.56 KM/H @ 29.76 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5

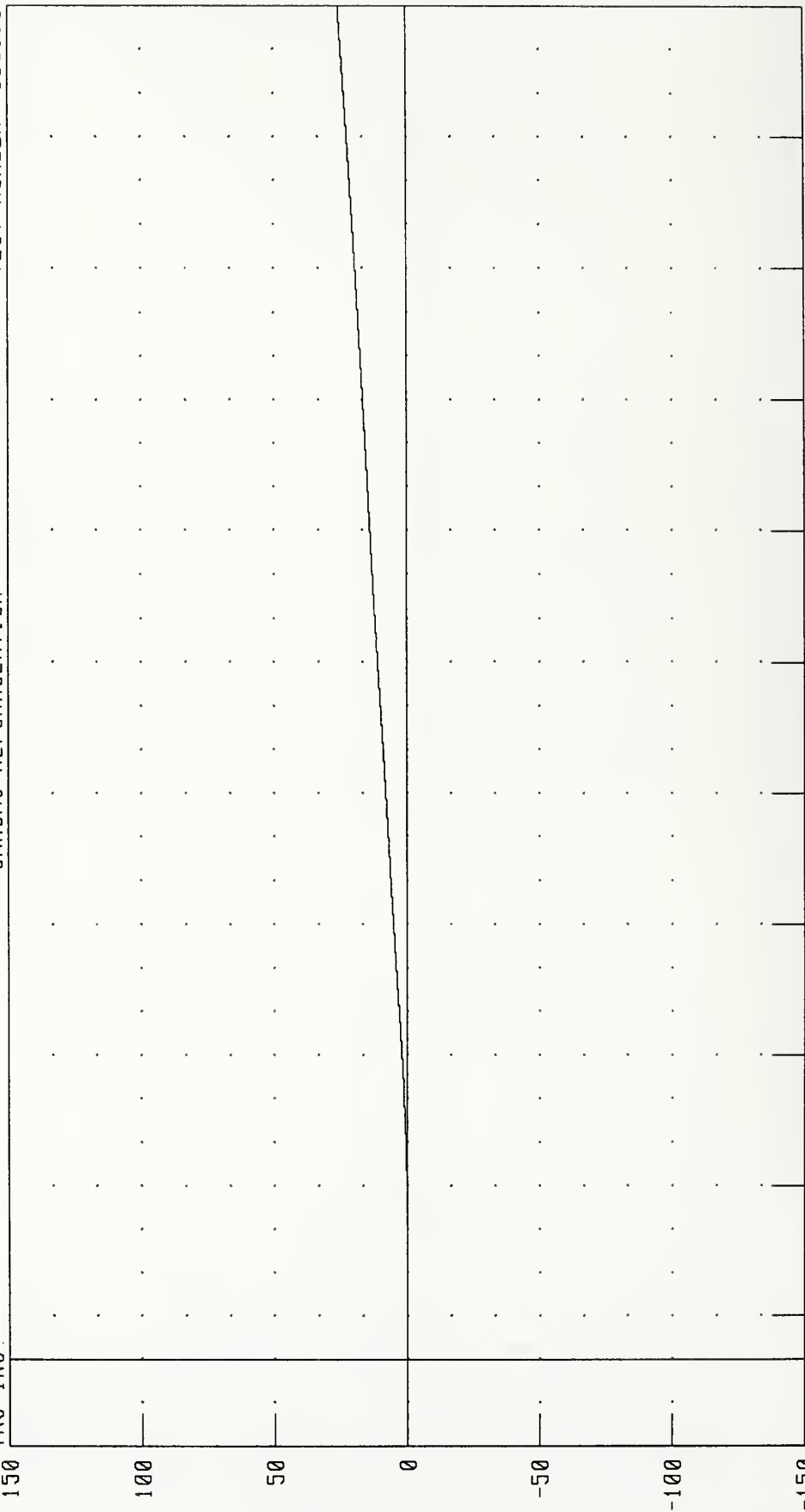
RIGHT FRONT SILL Y-AXIS DISPLACEMENT

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC.

DISPLACEMENT (MM X 10¹)

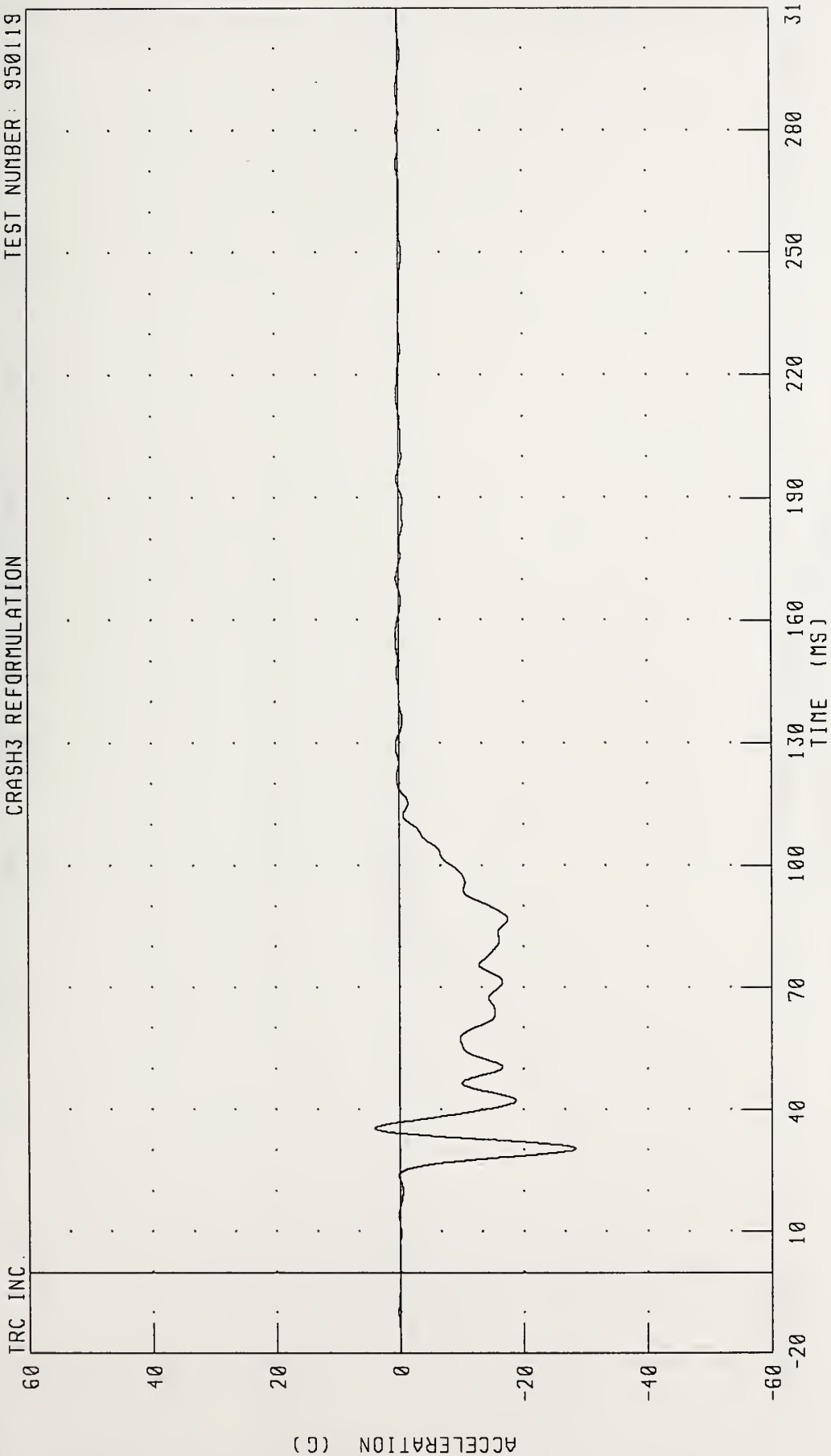


CHANNEL: RFSYD1 FILTER: CH CLASS 180

PEAK DATA: 256.20 MM @ 310.00 MS; -0.62 MM @ 30.88 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
LEFT REAR SEAT X-AXIS ACCELERATION

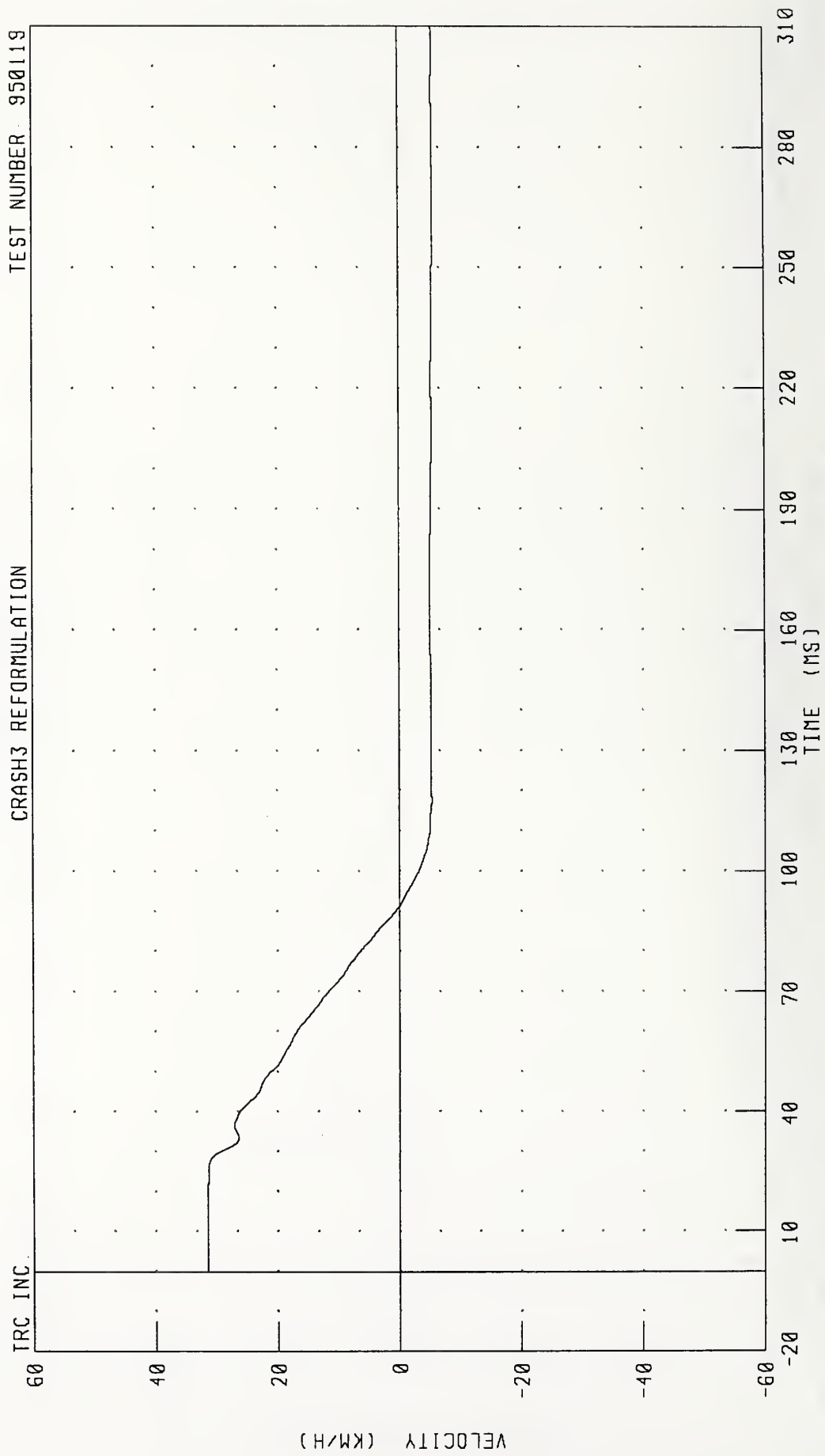
CRASH3 REFORMULATION TEST NUMBER: 950119



CHANNEL: TLRXG1 FILTER: CH. CLASS 60

PEAK DATA 4 05 G @ 35 44 MS, -28 45 G @ 30 40 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
LEFT REAR SEAT X-AXIS VELOCITY



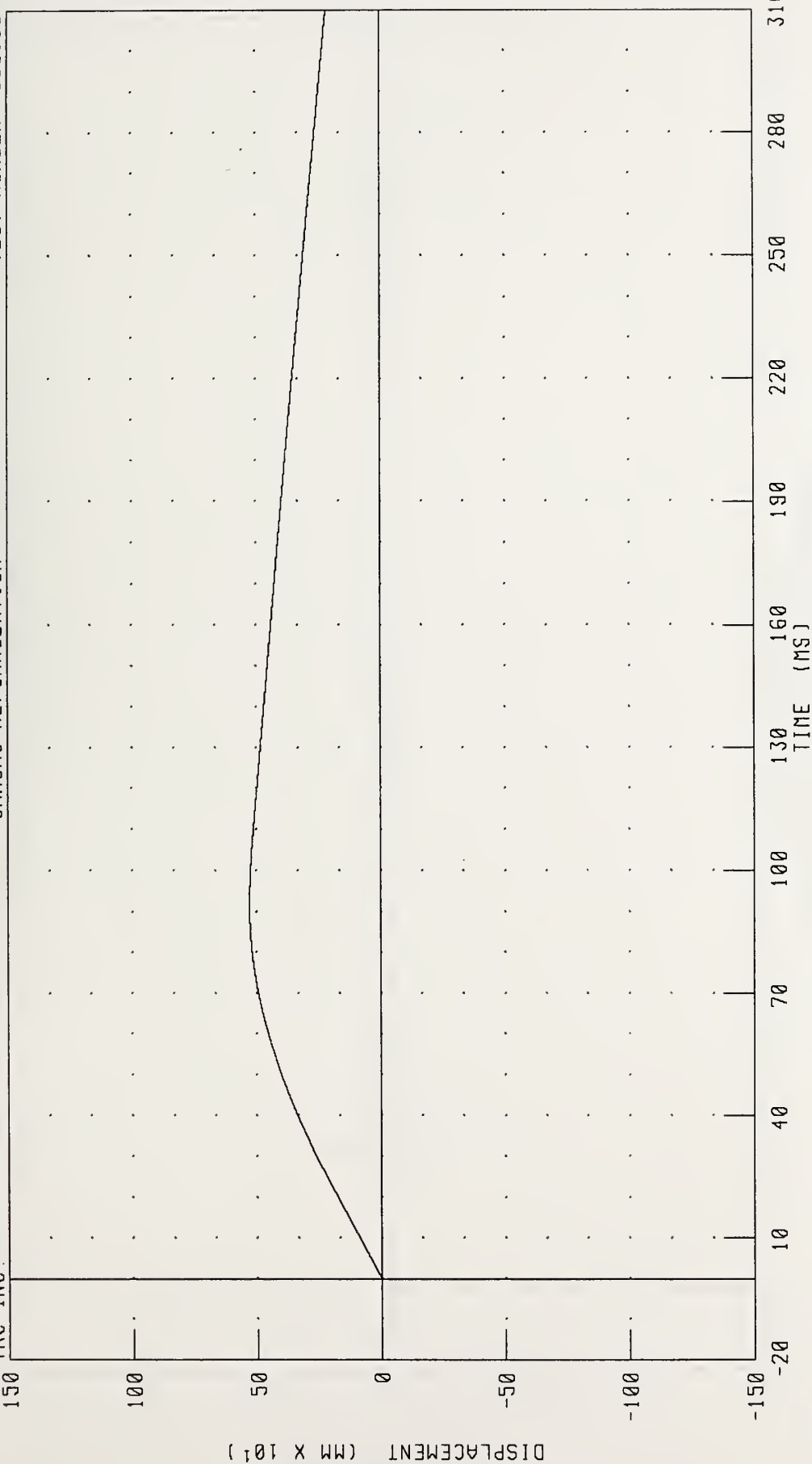
CHANNEL: TLRXY1 FILTER: CH CLASS 180

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
LEFT REAR SEAT X-AXIS DISPLACEMENT

TEST NUMBER 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL: TLRX01 FILTER: CH CLASS 180

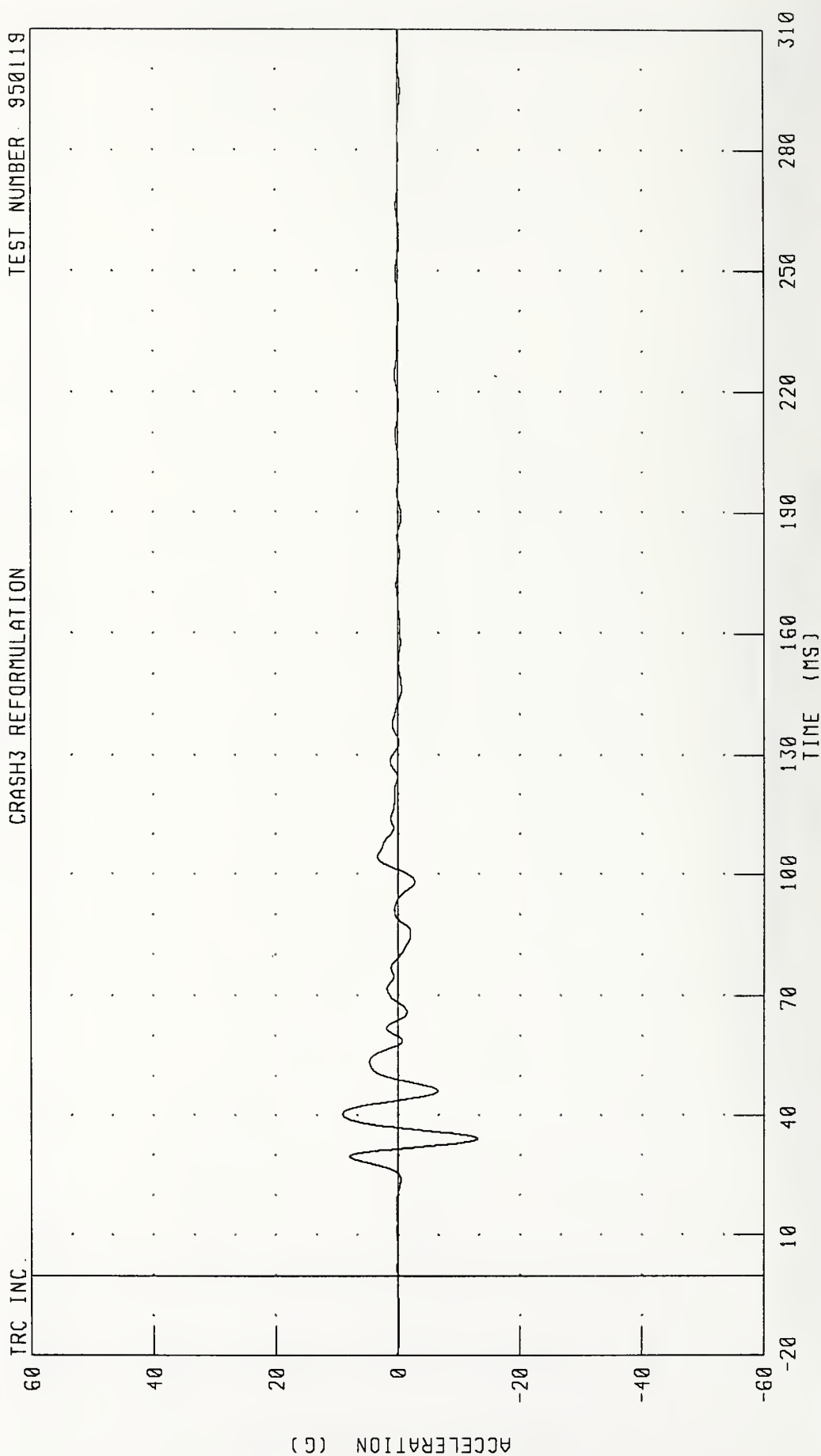
PEAK DATA: 528.57 MM @ 91.28 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5

LEFT REAR SEAT Y-AXIS ACCELERATION

CRASH3 REFORMULATION

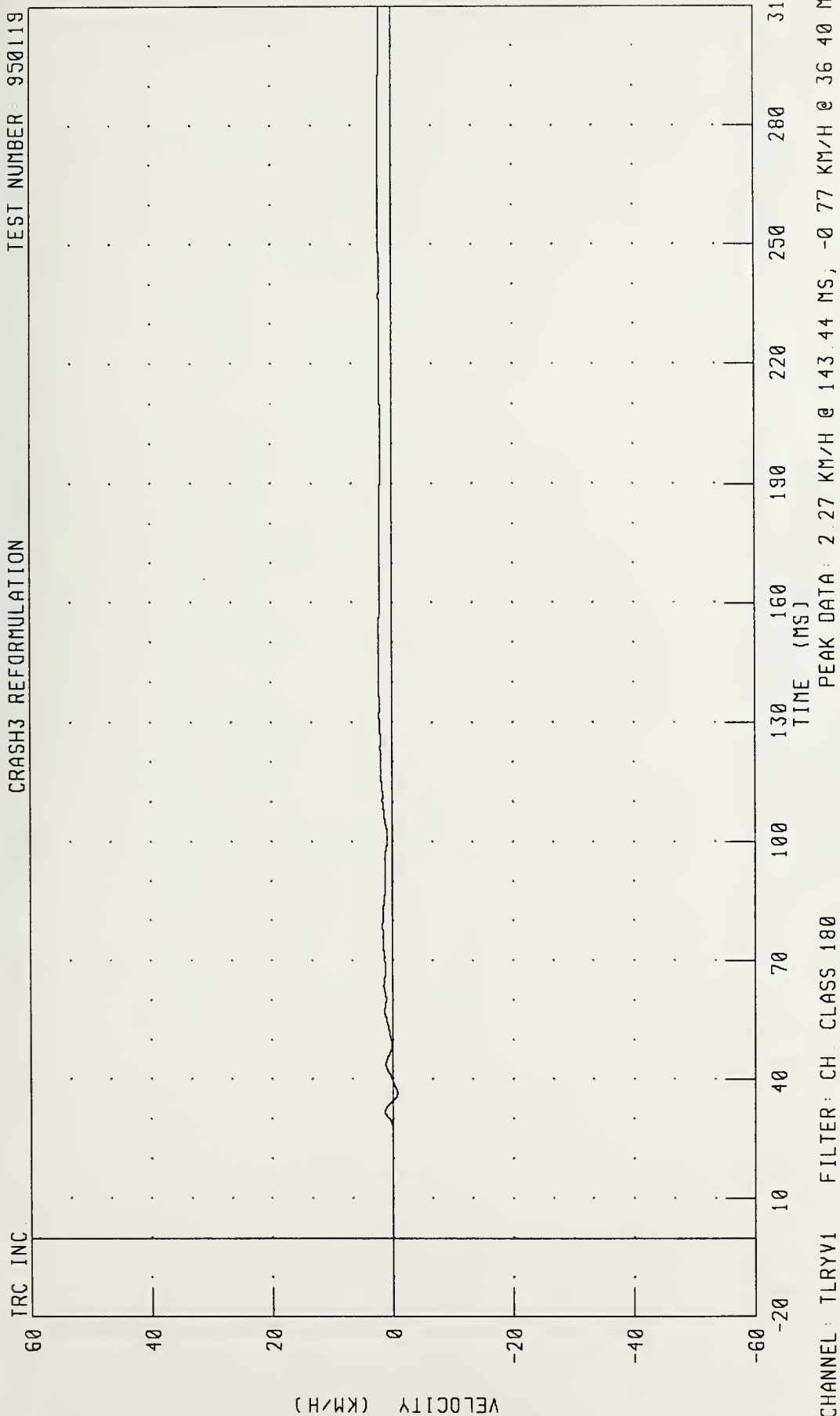
TEST NUMBER 950119



CHANNEL TLRG1 FILTER CH CLASS 60

PEAK DATA: 9.10 G @ 40 MS, -13.08 G @ 34 24 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
LEFT REAR SEAT Y-AXIS VELOCITY

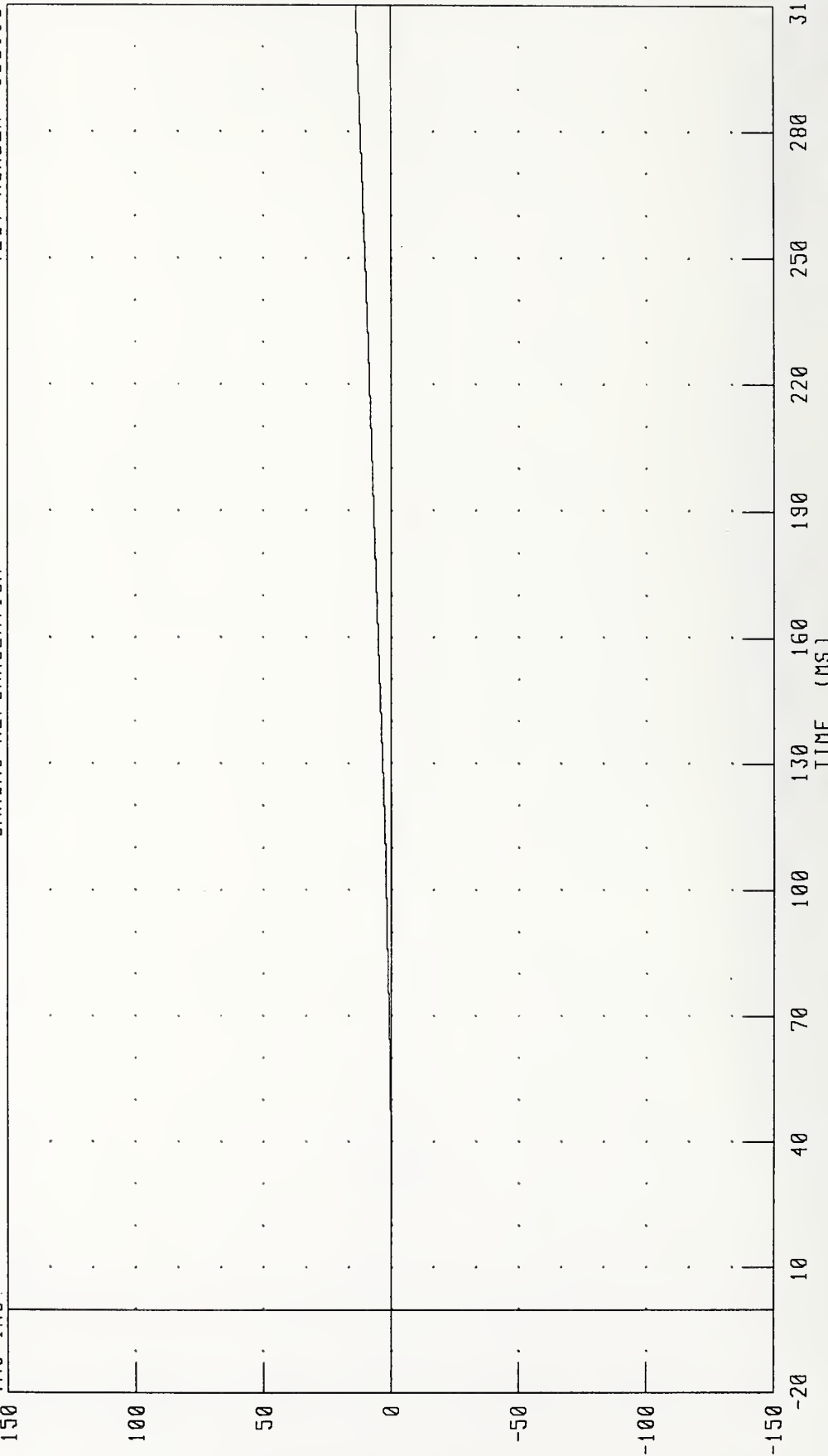


1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
LEFT REAR SEAT Y-AXIS DISPLACEMENT

CRASH3 REFORMULATION TEST NUMBER: 950119

TRC INC

DISPLACEMENT (MM X 10¹)



CHANNEL: TLRYD1 FILTER: CH CLASS 180

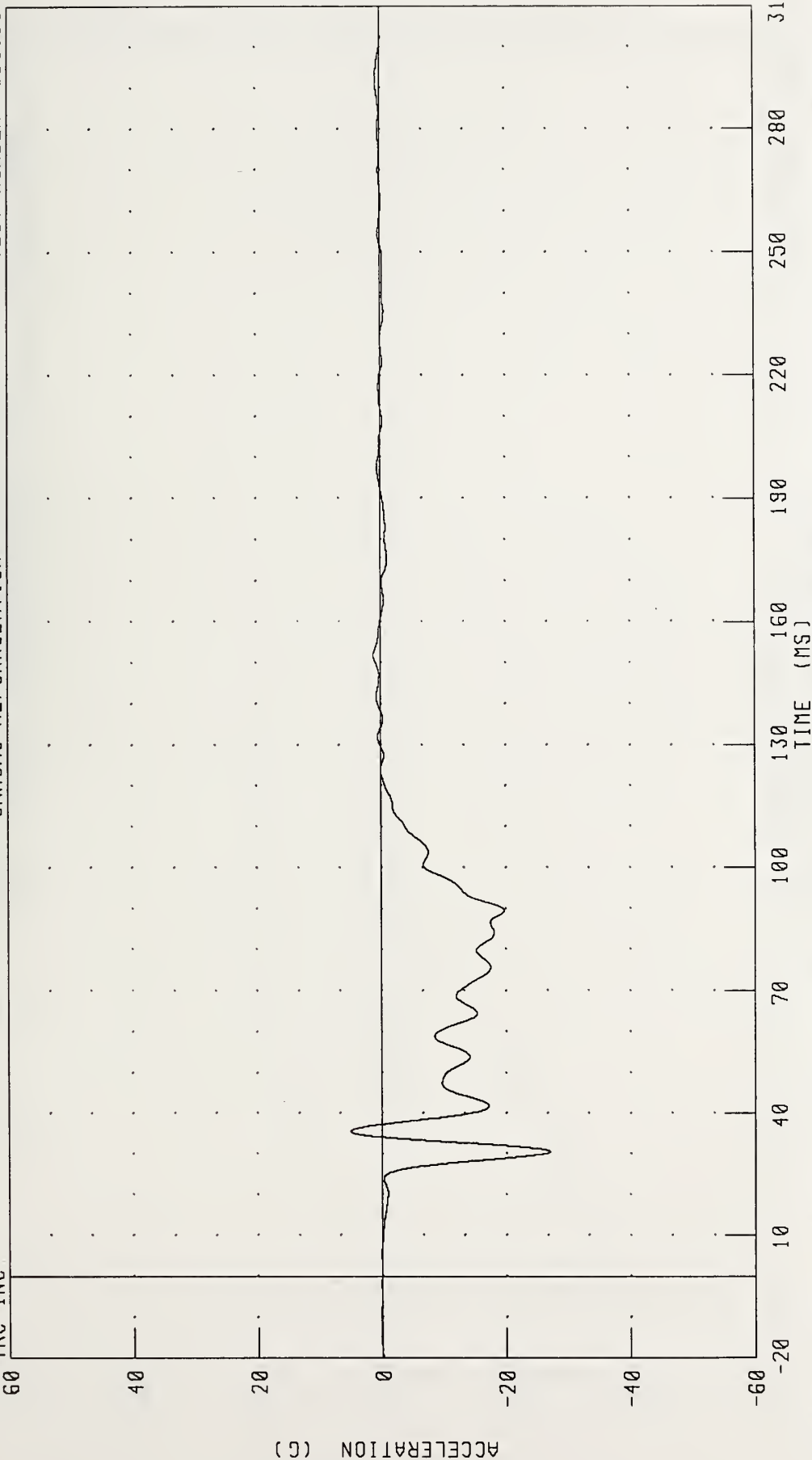
PEAK DATA: 137.26 MM @ 310.00 MS, 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
RIGHT REAR SEAT X-AXIS ACCELERATION

TEST NUMBER 950119

CRASH3 REFORMULATION

TRC INC



CHANNEL TRRXG1 FILTER CH CLASS 60

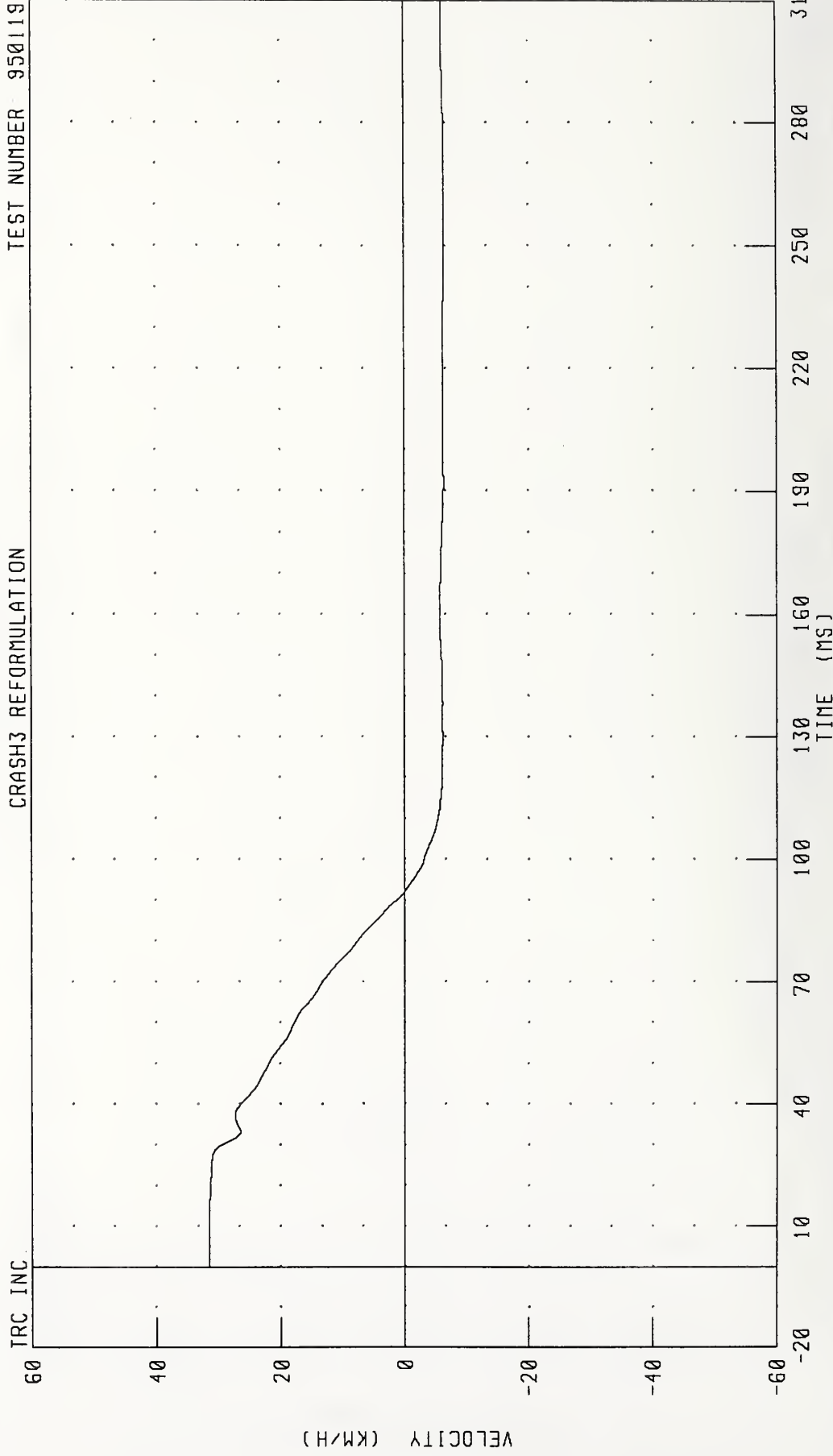
PEAK DATA 5.13 G @ 35.52 MS; -27.04 G @ 30.56 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5

RIGHT REAR SEAT X-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER 950119



CHANNEL: TRRXV1 FILTER: CH. CLASS 180

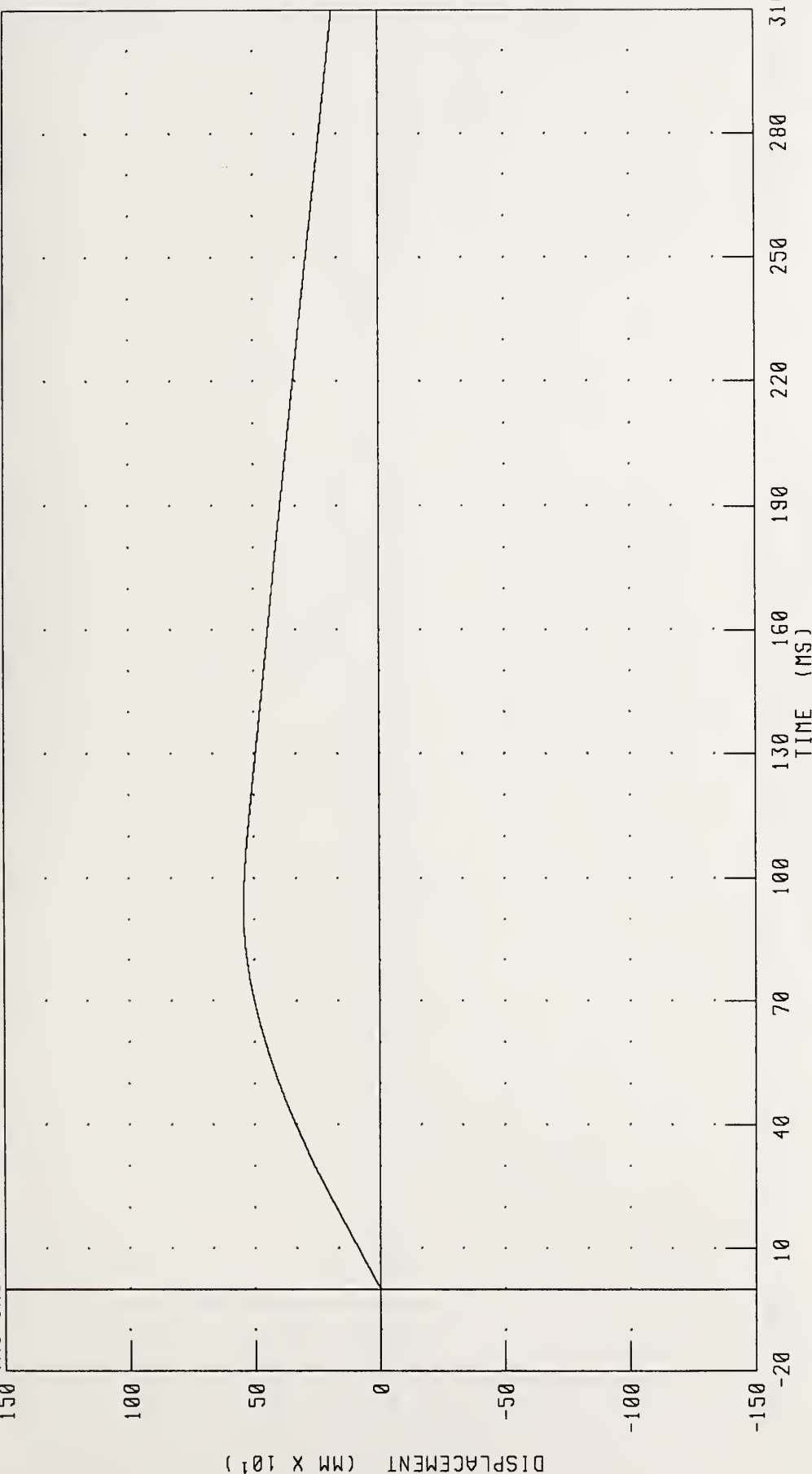
PEAK DATA: 31.52 KM/H @ 7.20 MS, -6.51 KM/H @ 252.16 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
 RIGHT REAR SEAT X-AXIS DISPLACEMENT

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC



CHANNEL: TRRXD1 FILTER: CH. CLASS 180

TIME (MS)

PEAK DATA: 543.38 MM @ 92.00 MS; 0.00 MM @ 0.00 MS

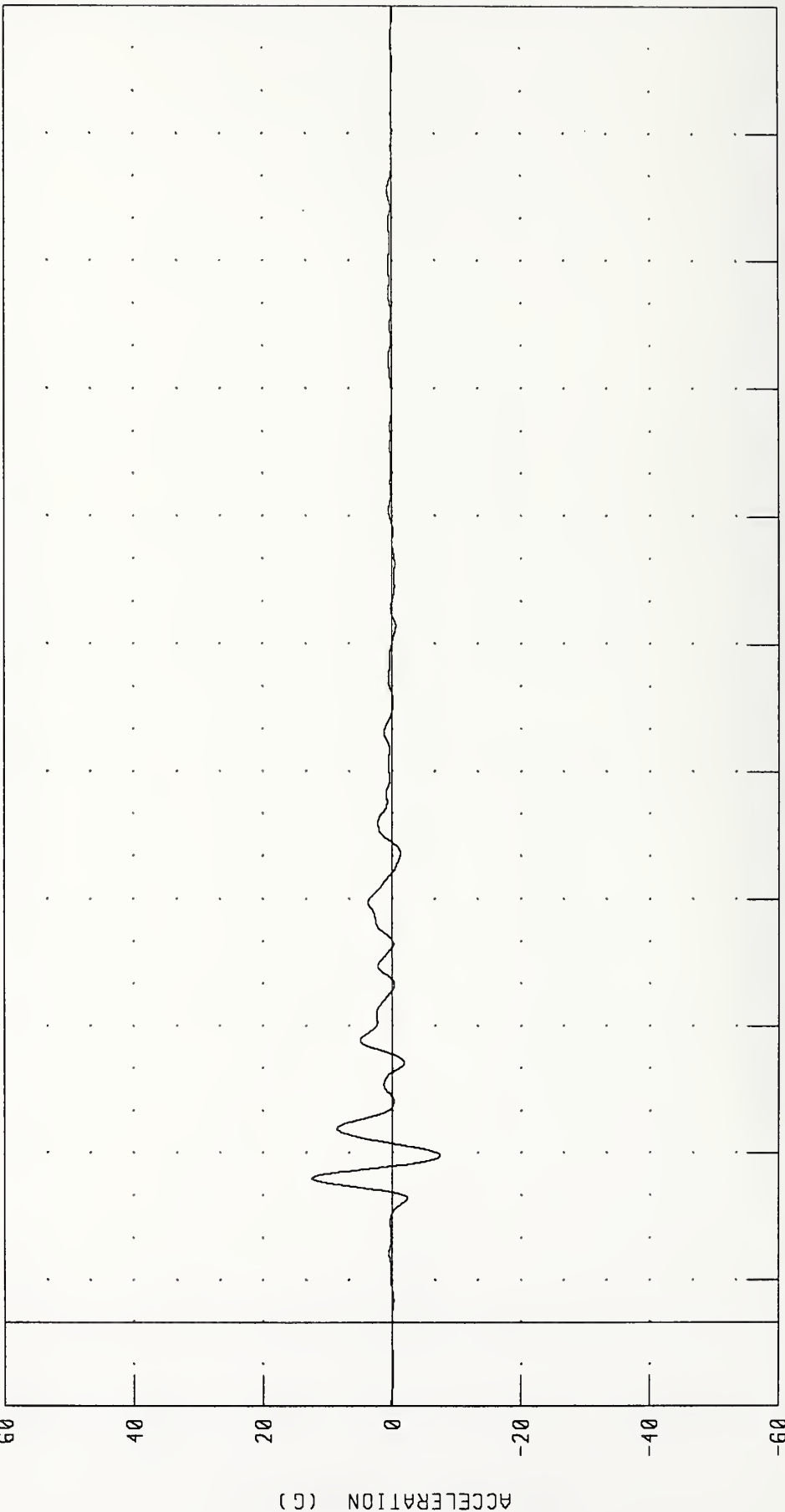
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5

RIGHT REAR SEAT Y-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.



CHANNEL: TRRY61 FILTER: CH CLASS 60

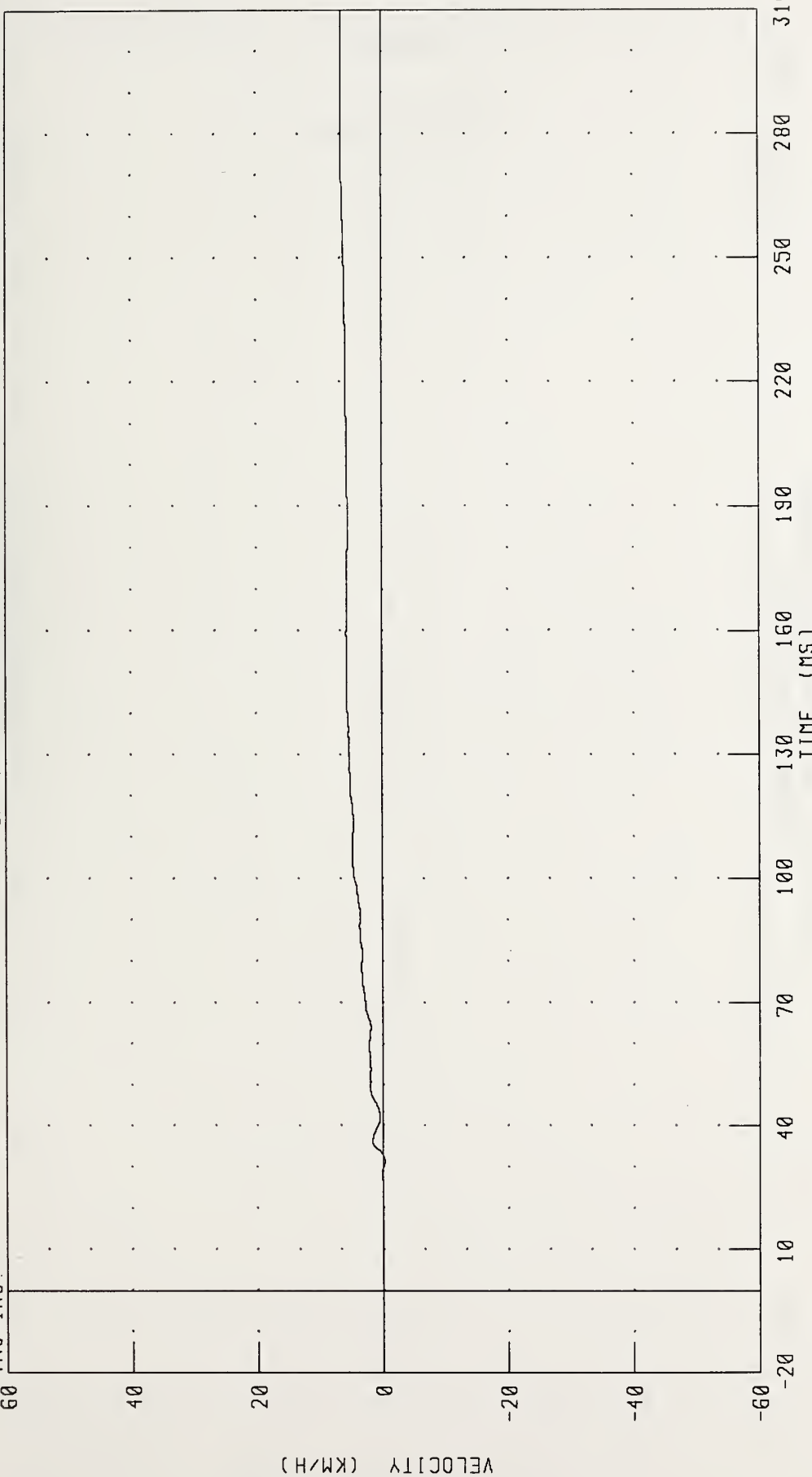
PEAK DATA 12.51 G @ 34.16 MS, -7.43 G @ 39.44 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5
RIGHT REAR SEAT Y-AXIS VELOCITY

TEST NUMBER: 950119

CRASH3 REFORMULATION

TRC INC.



CHANNEL: TRRYV1 FILTER: CH CLASS 180

PEAK DATA

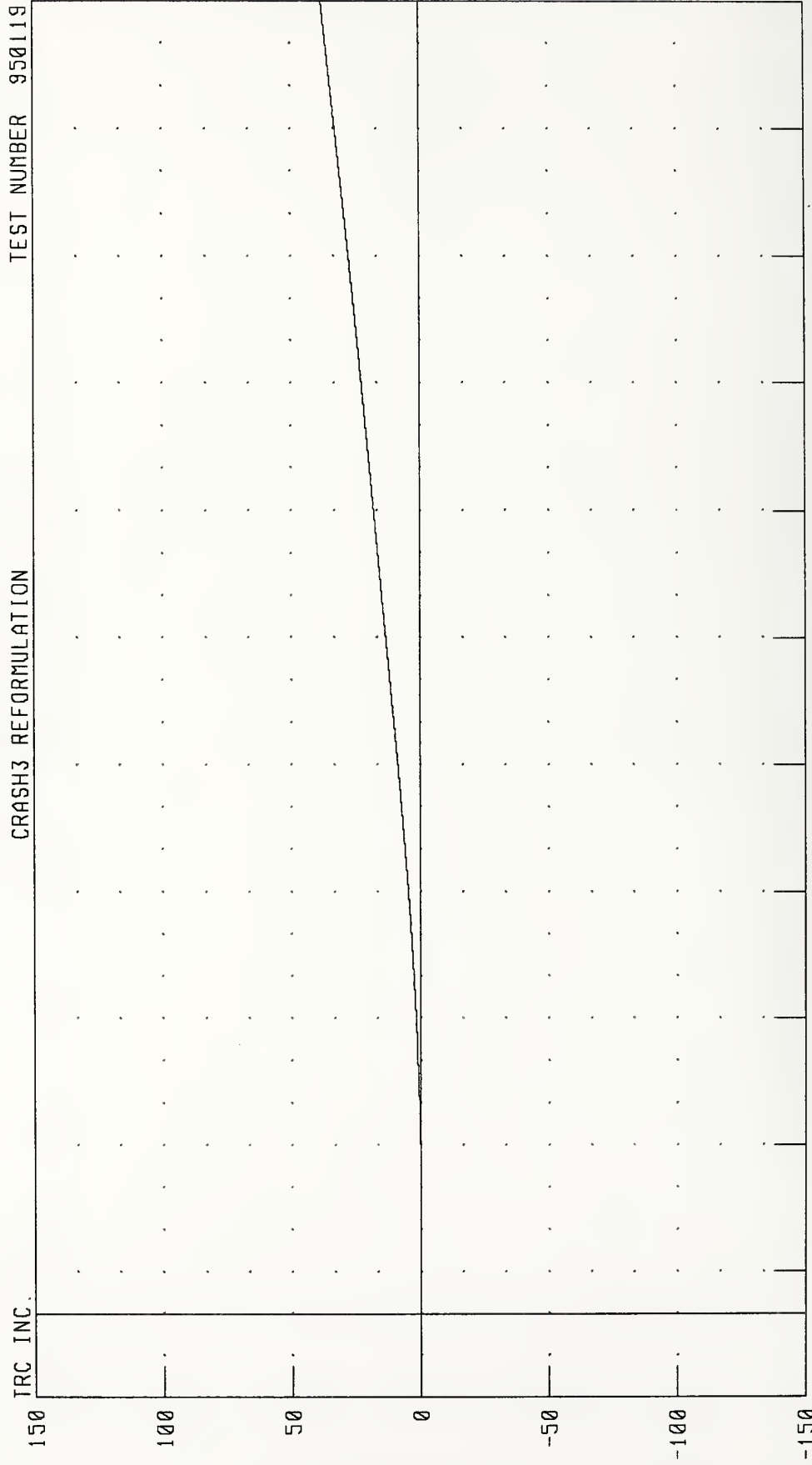
6 41 KM/H @ 304.80 MS; -0.29 KM/H @ 31 44 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 4 OF 5

RIGHT REAR SEAT Y-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TEST NUMBER 950119



CHANNEL: TRRYD1 FILTER: CH. CLASS 180

PEAK DATA: 380.62 MM @ 310.00 MS; -0.05 MM @ 15.28 MS

Data Plots

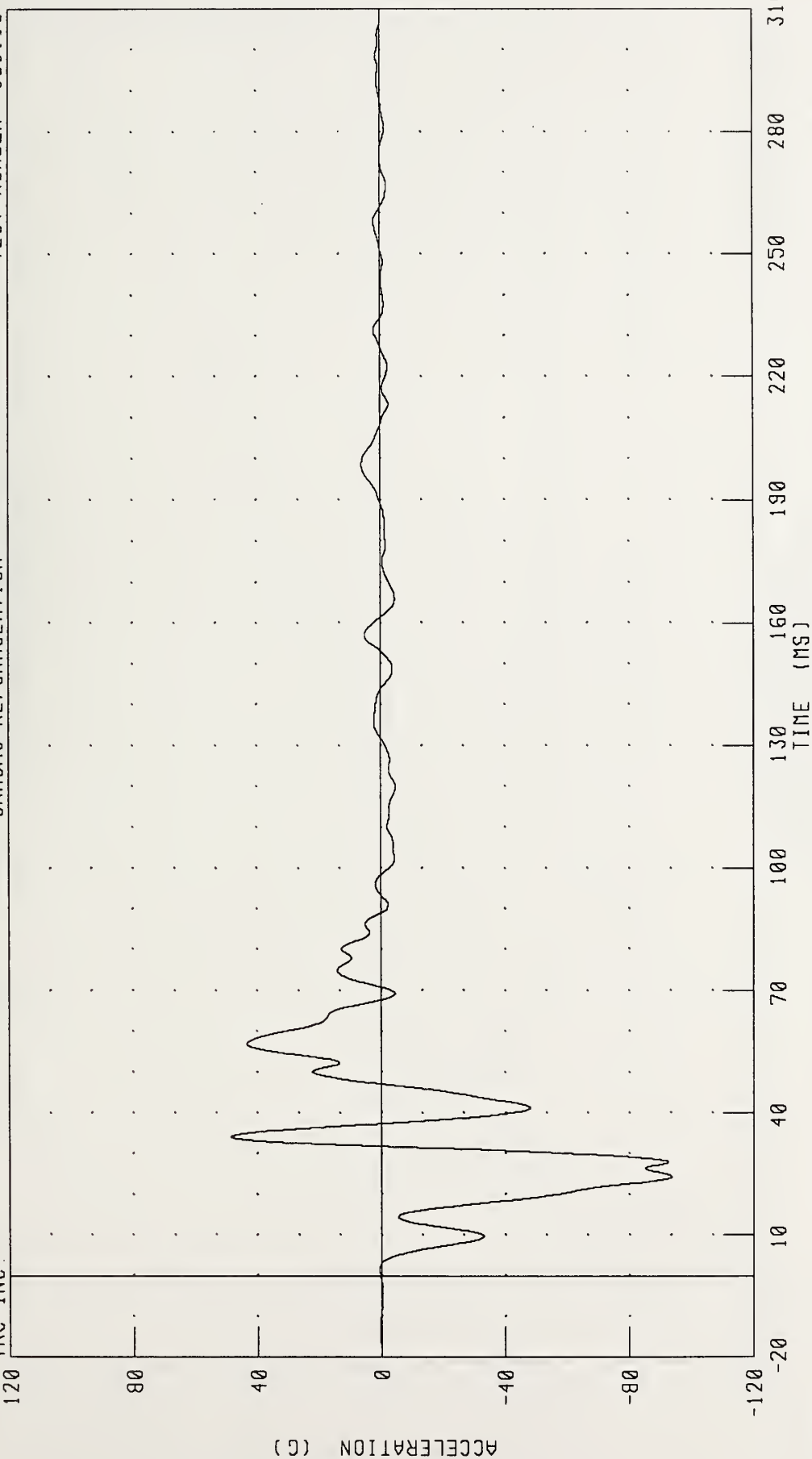
Test No. 950119-5



1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
VEHICLE CG X-AXIS ACCELERATION

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



CHANNEL VCGXG1 FILTER CH CLASS 60

PEAK DATA: 48.71 G @ 34.16 MS, -93.65 G @ 24.32 MS

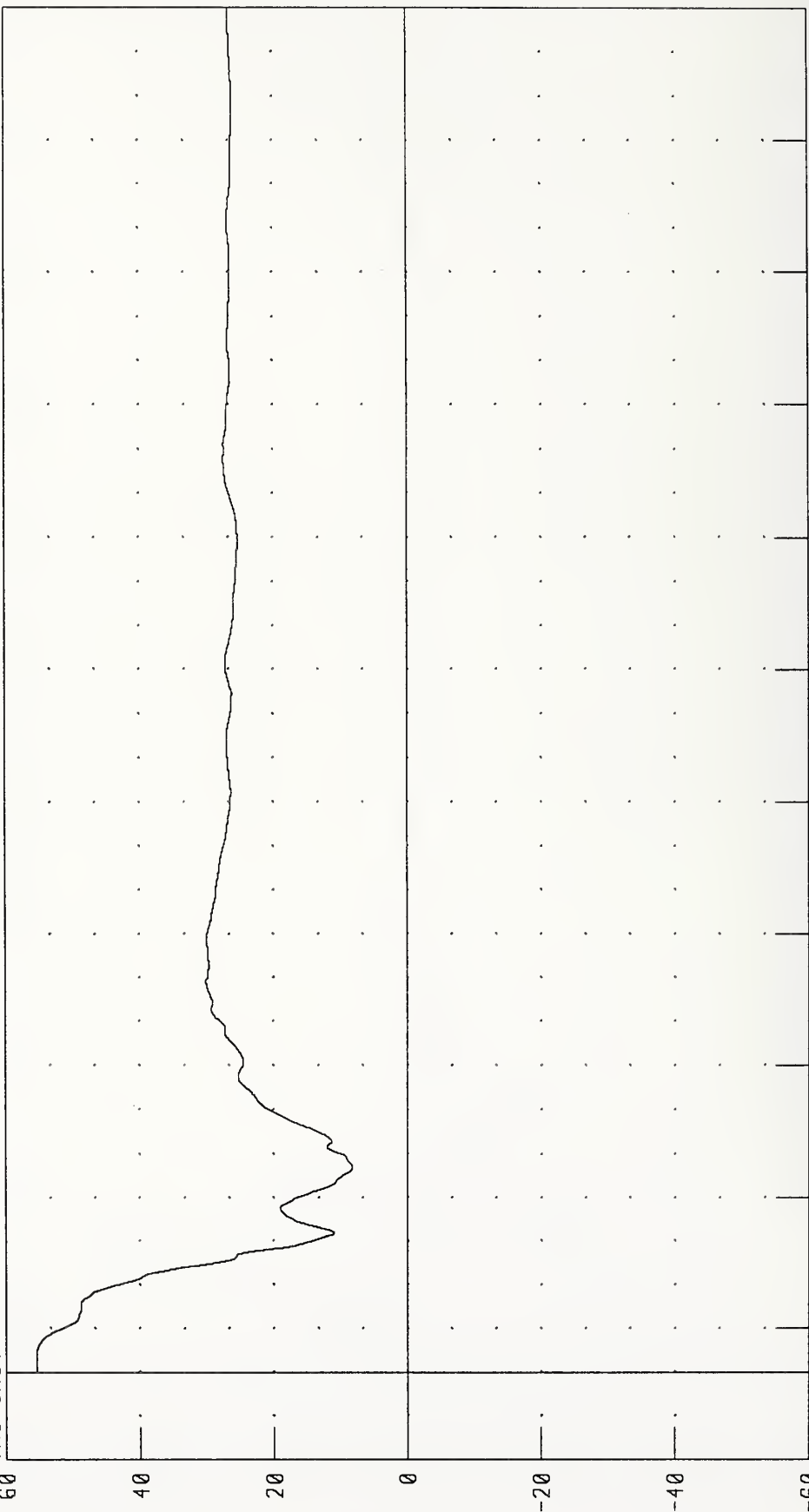
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5

VEHICLE CG X-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.



CHANNEL: VCGXV1 FILTER: CH CLASS 180

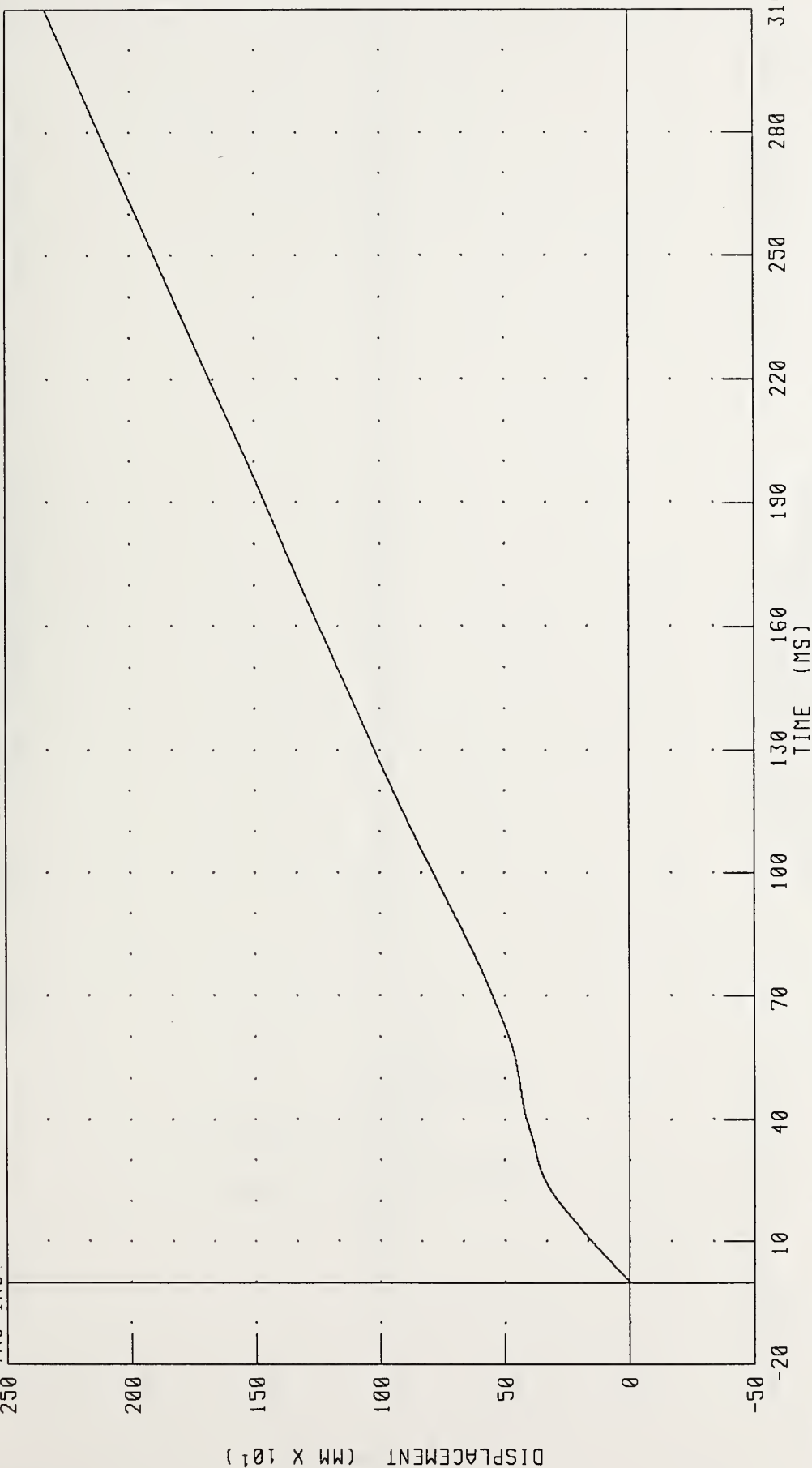
PEAK DATA: 55.42 KM/H @ 1.68 MS; 8.23 KM/H @ 46.88 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
VEHICLE CG X-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TRC INC.

TEST NUMBER 950119



CHANNEL: VCGXD1 FILTER: CH CLASS 180

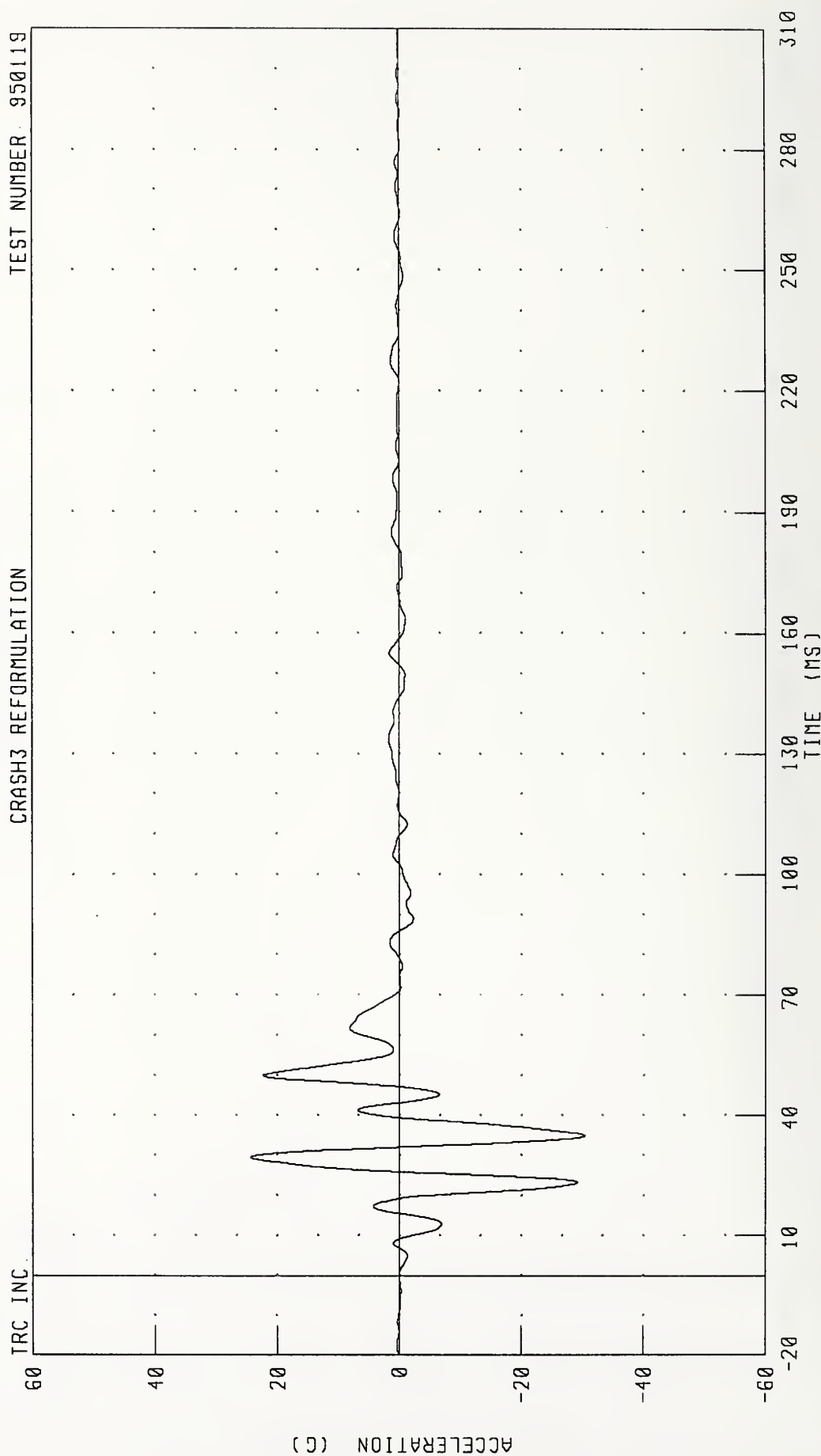
PEAK DATA: 2340.60 MM @ 310.00 MS, 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5

VEHICLE CG Y-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER: 950119



CHANNEL: VCGY01 FILTER: CH CLASS 60

PEAK DATA: 24 38 G @ 29 52 MS; -30 42 G @ 34 96 MS

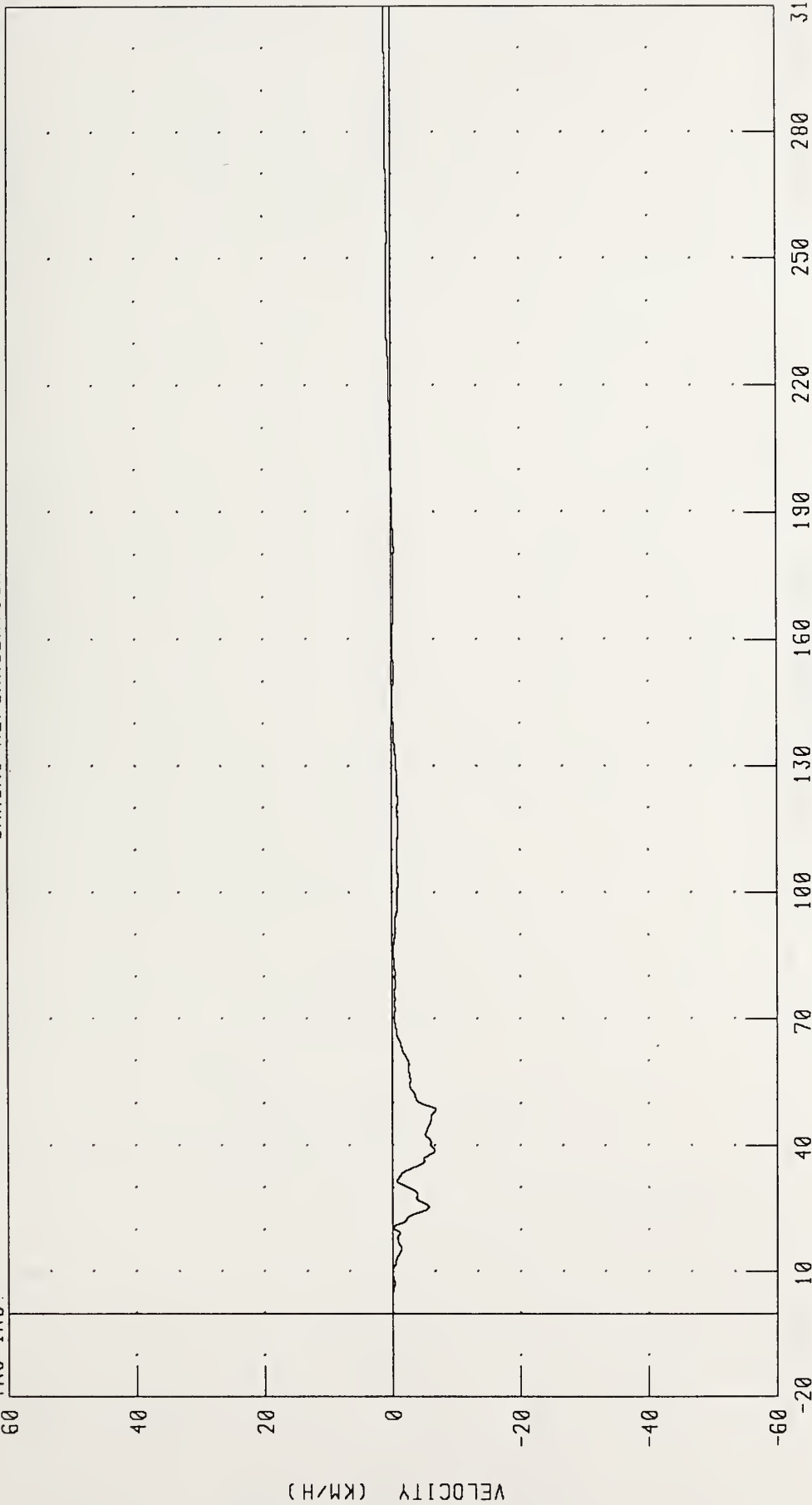
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5

VEHICLE CG Y-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER: 950119

TRC INC.



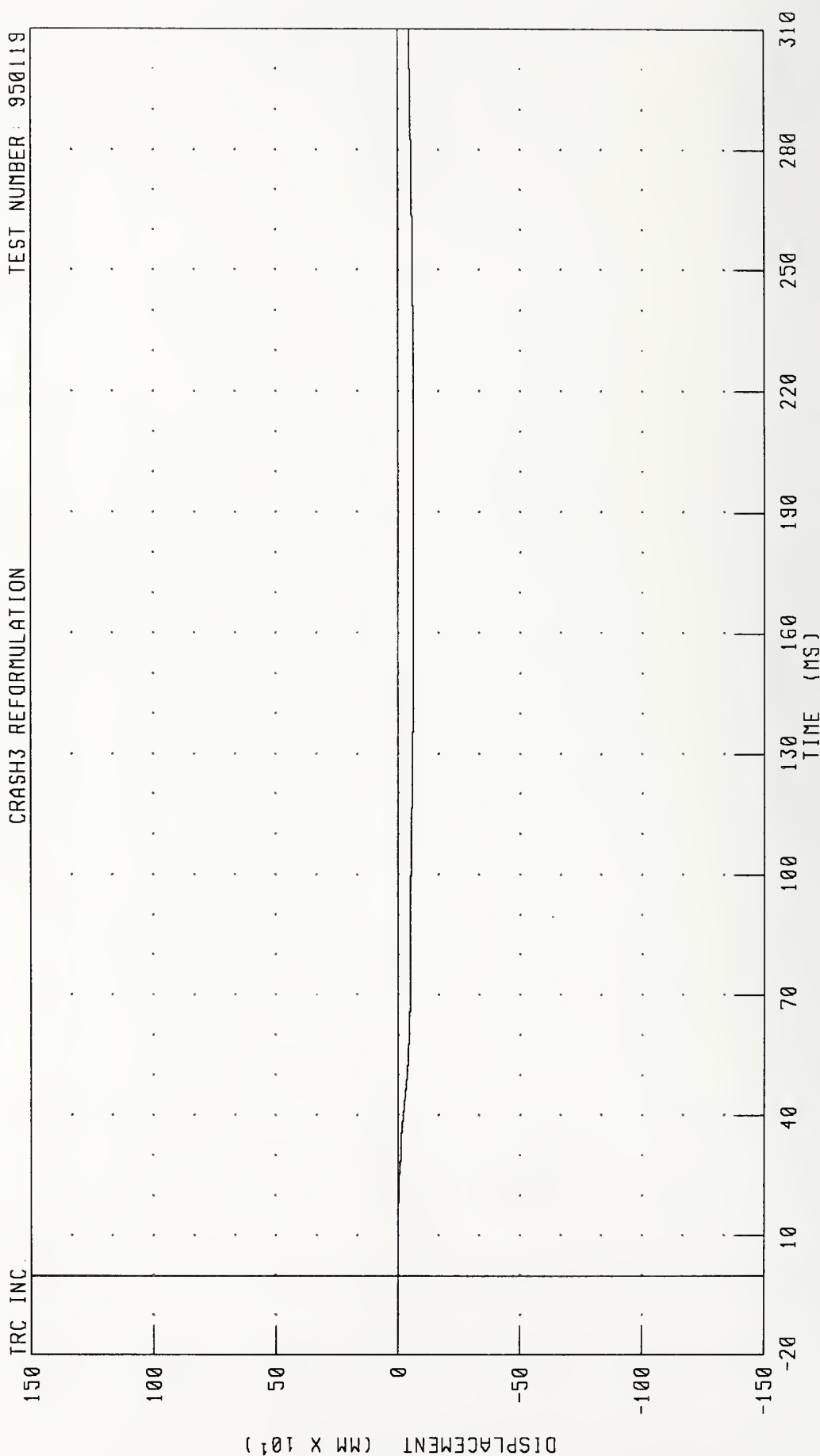
CHANNEL: VCGYV1 FILTER: CH. CLASS 180

PEAK DATA 1.01 KM/H @ 308.48 MS, -6 B1 KM/H @ 48.48 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
VEHICLE CC Y-AXIS DISPLACEMENT

TEST NUMBER: 950119

CRASH3 REFORMULATION



CHANNEL: VCGYD1 FILTER: CH CLASS 180

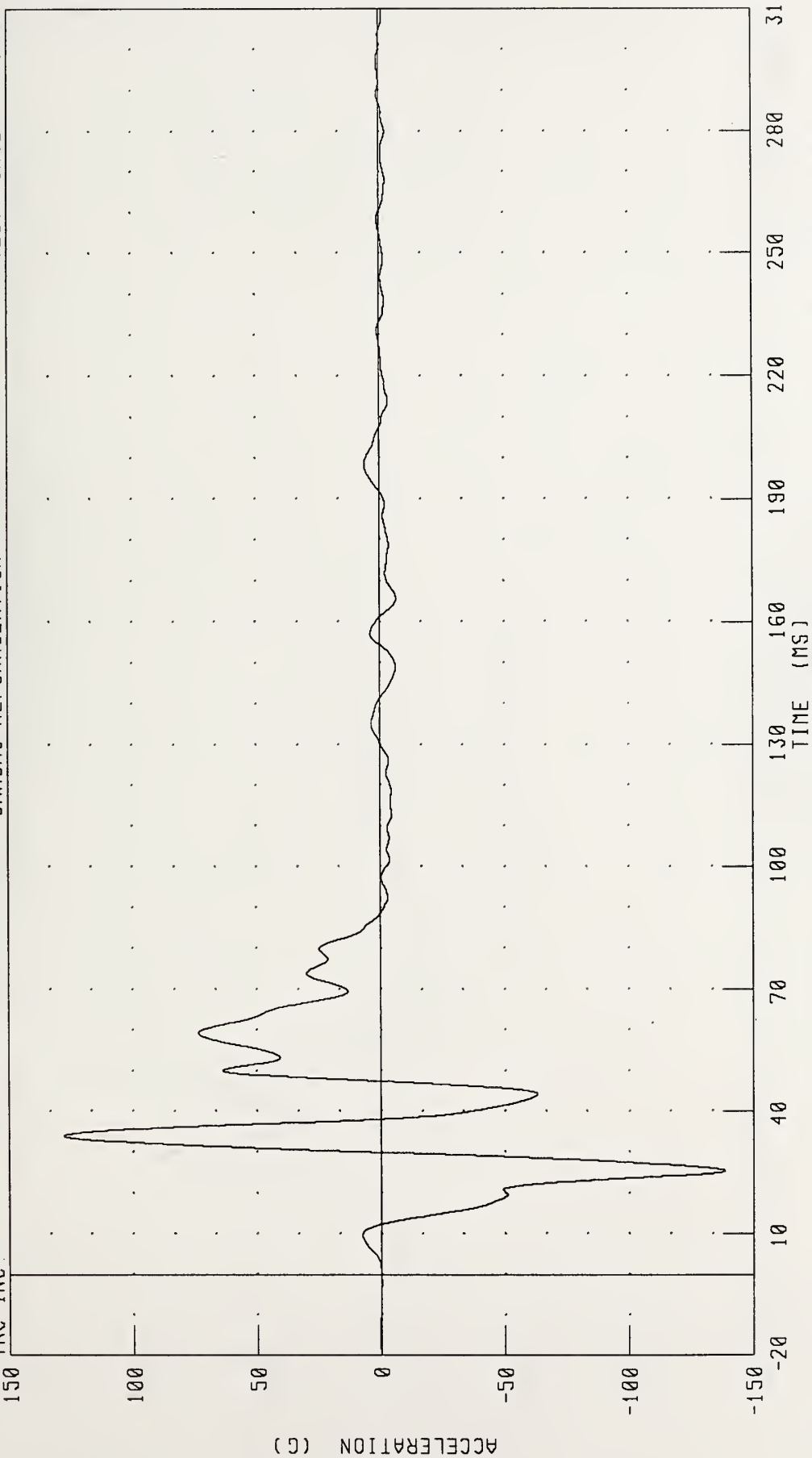
PEAK DATA: 0.01 MM @ 2.88 MS, -65.26 MM @ 198.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
VEHICLE CG Z-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.



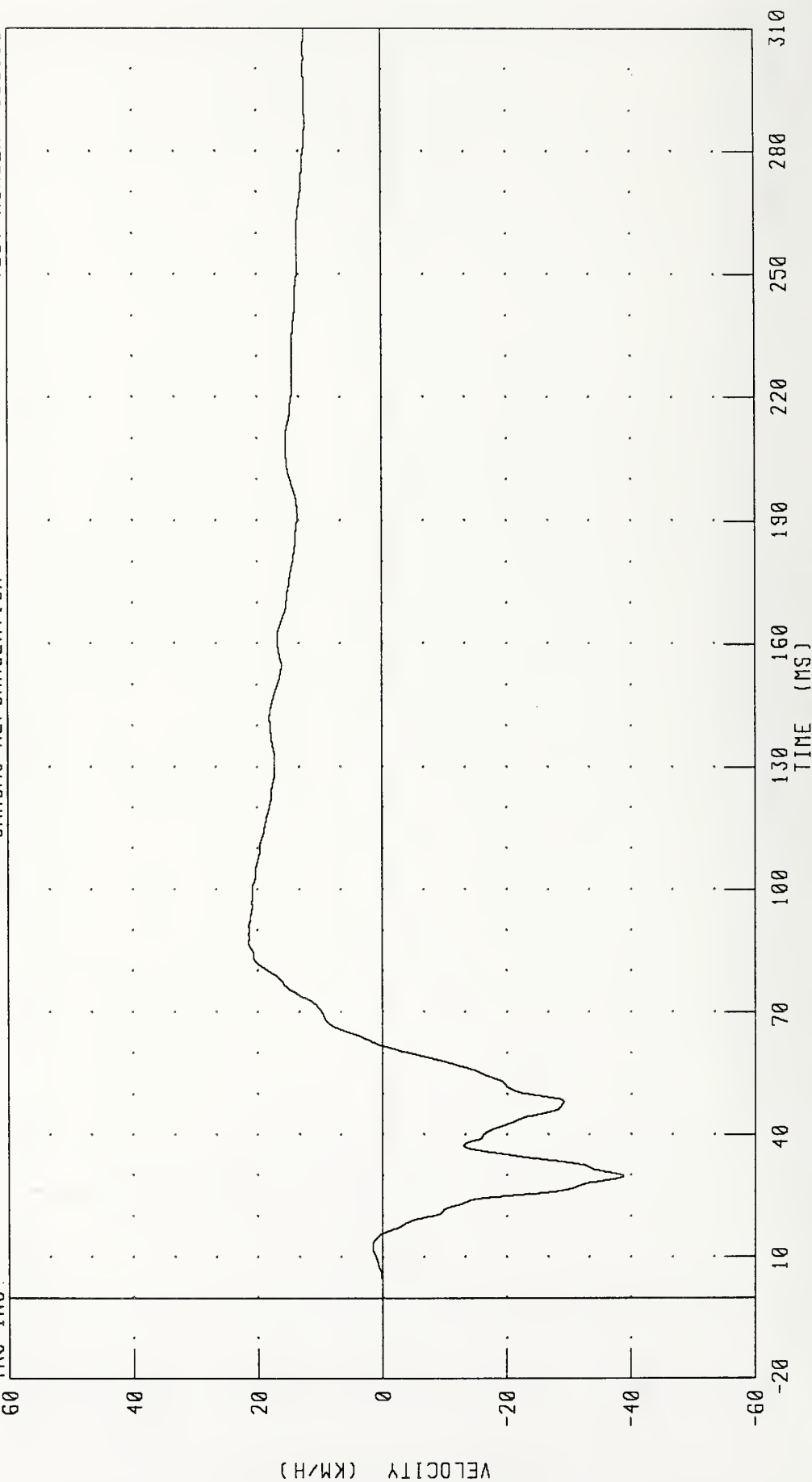
CHANNEL VCGZG1 FILTER CH CLASS 60 PEAK DATA: 128.00 G @ 34.00 MS, -138.59 G @ 25.44 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
VEHICLE CG Z-AXIS VELOCITY

CRASH3 REFORMULATION

TRC INC.

TEST NUMBER: 950119

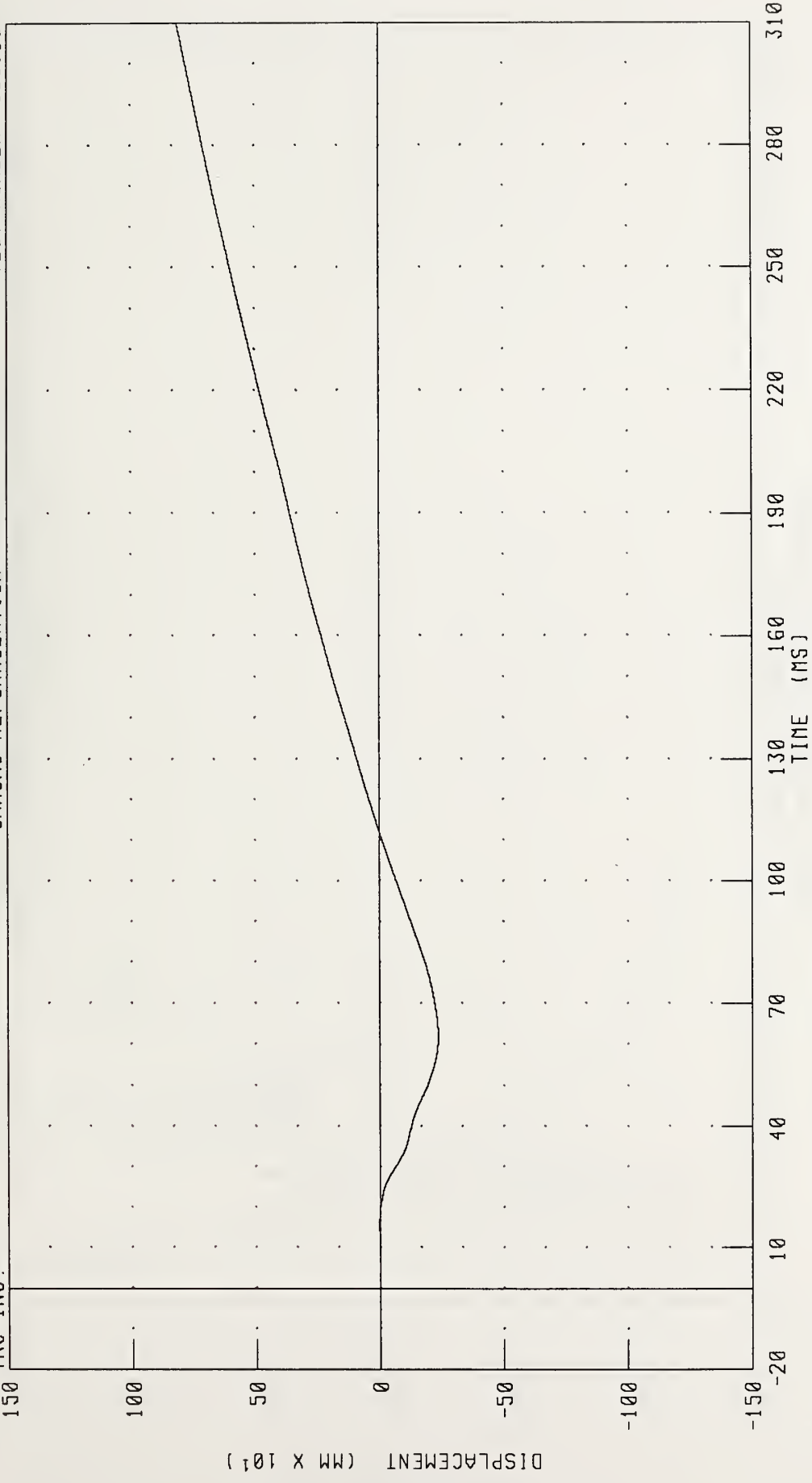


CHANNEL: VCGZV1 FILTER: CH. CLASS 180

PEAK DATA: 21.48 KM/H @ 86.96 MS; -38.85 KM/H @ 29.84 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
 VEHICLE CG Z-AXIS DISPLACEMENT

TRC INC. CRASH3 REFORMULATION TEST NUMBER 950119



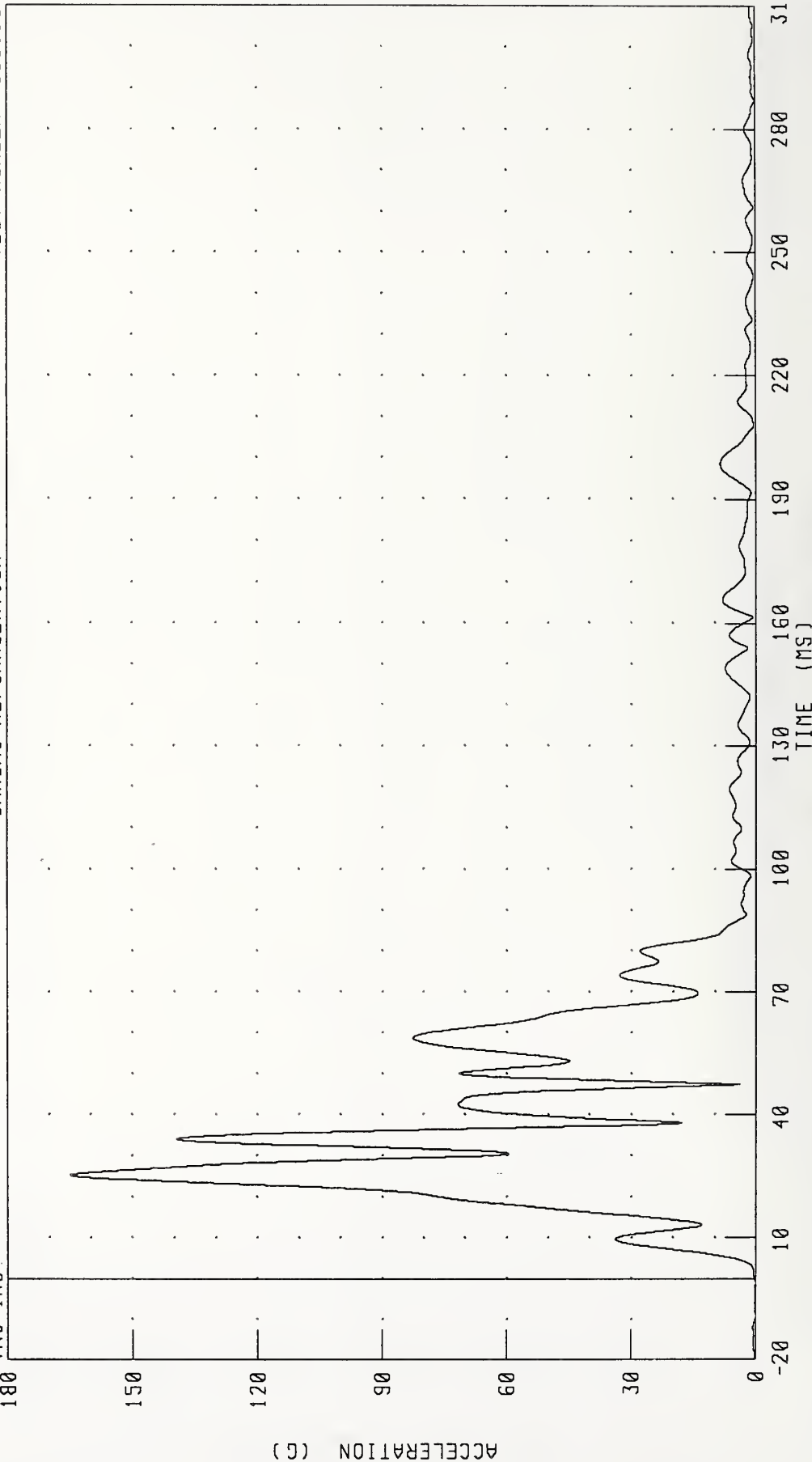
CHANNEL: VCGZD1 FILTER: CH. CLASS 180 PEAK DATA: 813.43 MM @ 310.00 MS, -235.80 MM @ 61.76 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
VEHICLE CG RESULTANT ACCELERATION

CRASH3 REFORMULATION

TRC INC.

TEST NUMBER 950119



CHANNEL: VCCRG1 FILTER: CH CLASS 60

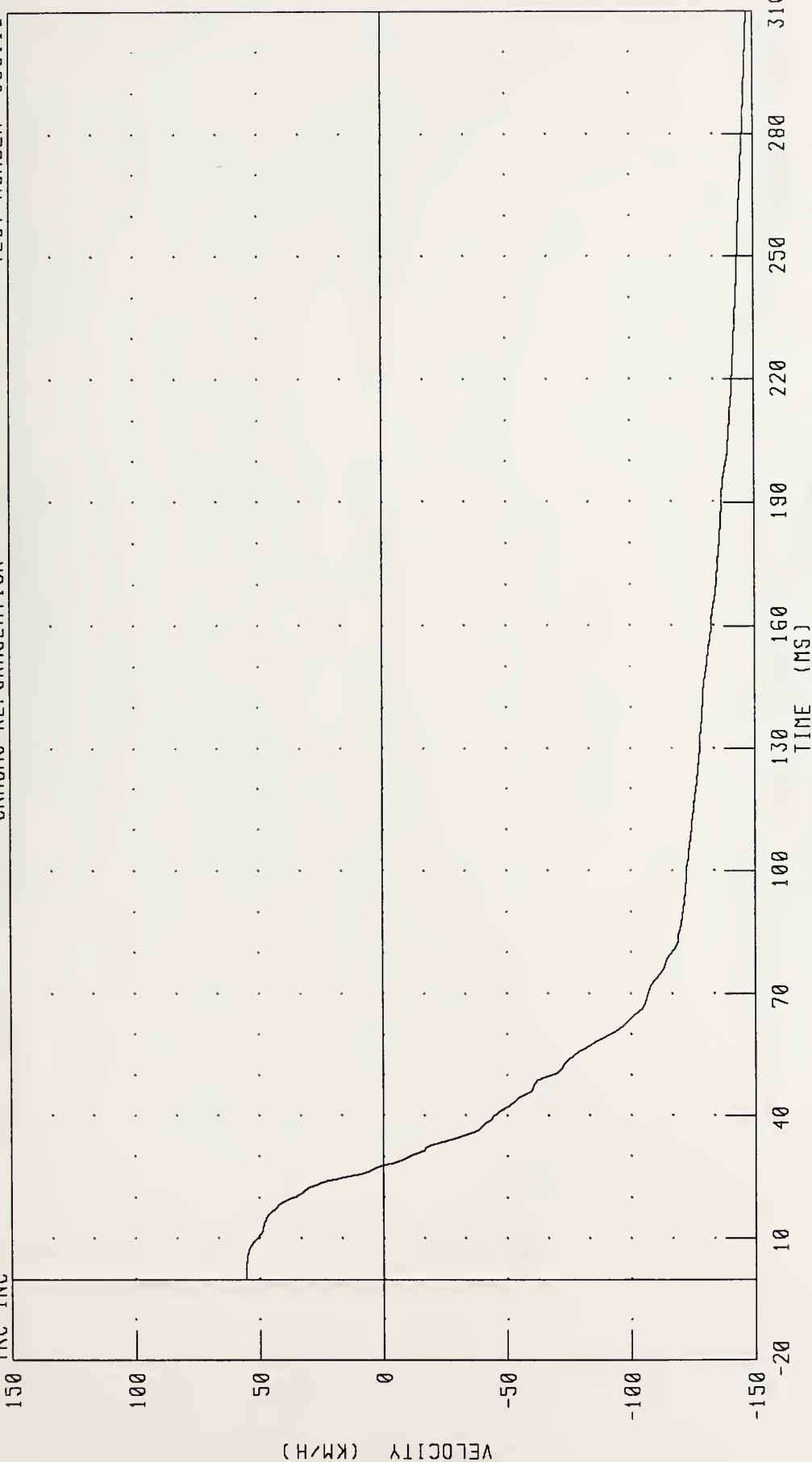
PEAK DATA: 165.05 G @ 25.28 MS, 0.10 G @ -9.28 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
VEHICLE CG RESULTANT VELOCITY

CRASH3 REFORMULATION

TRC INC

TEST NUMBER 950119

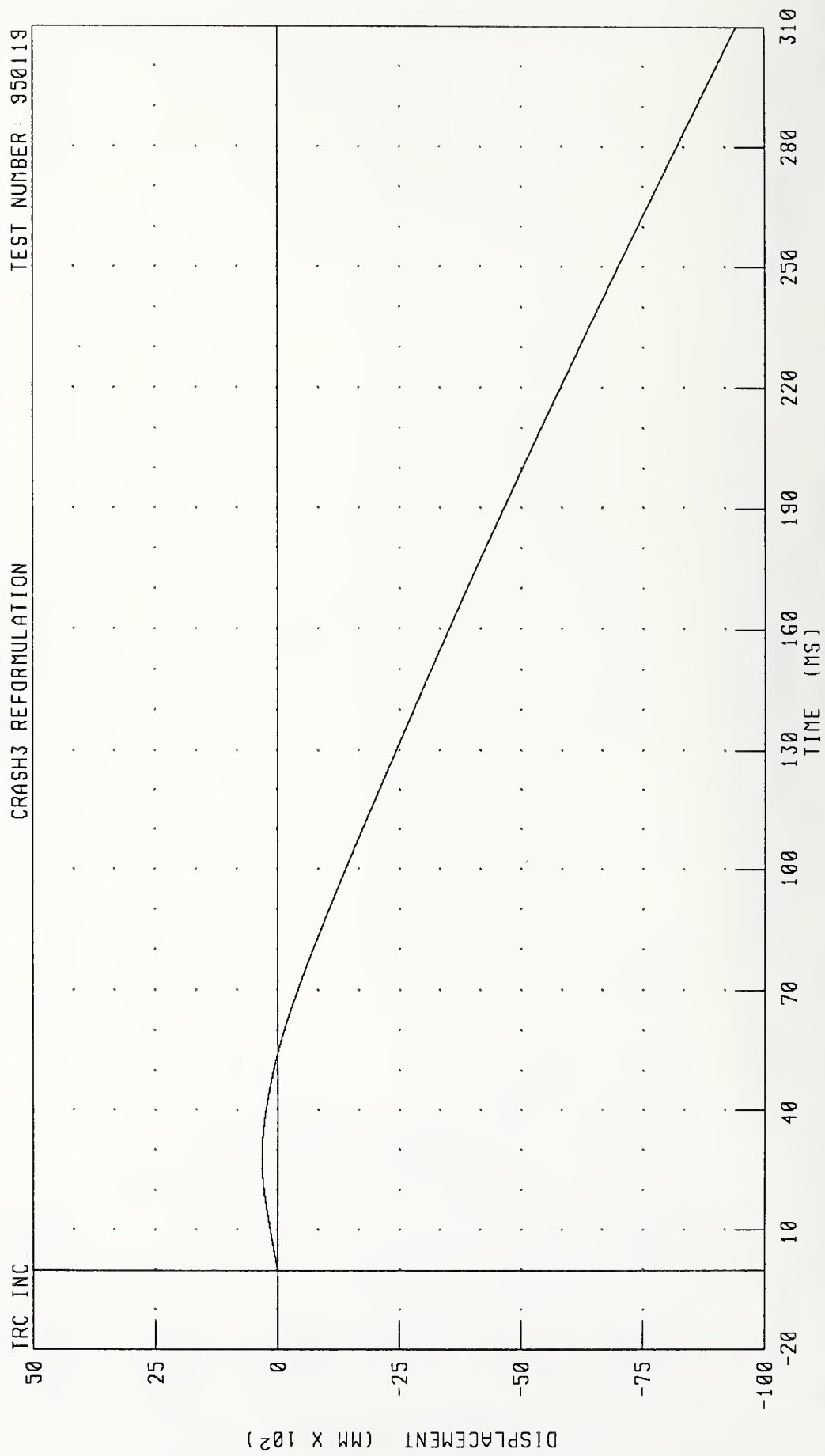


CHANNEL VCGRV1 FILTER: CH CLASS 180

PEAK DATA

55.40 KM/H @ 0 00 MS, -147 20 KM/H @ 310 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
 VEHICLE CG RESULTANT DISPLACEMENT

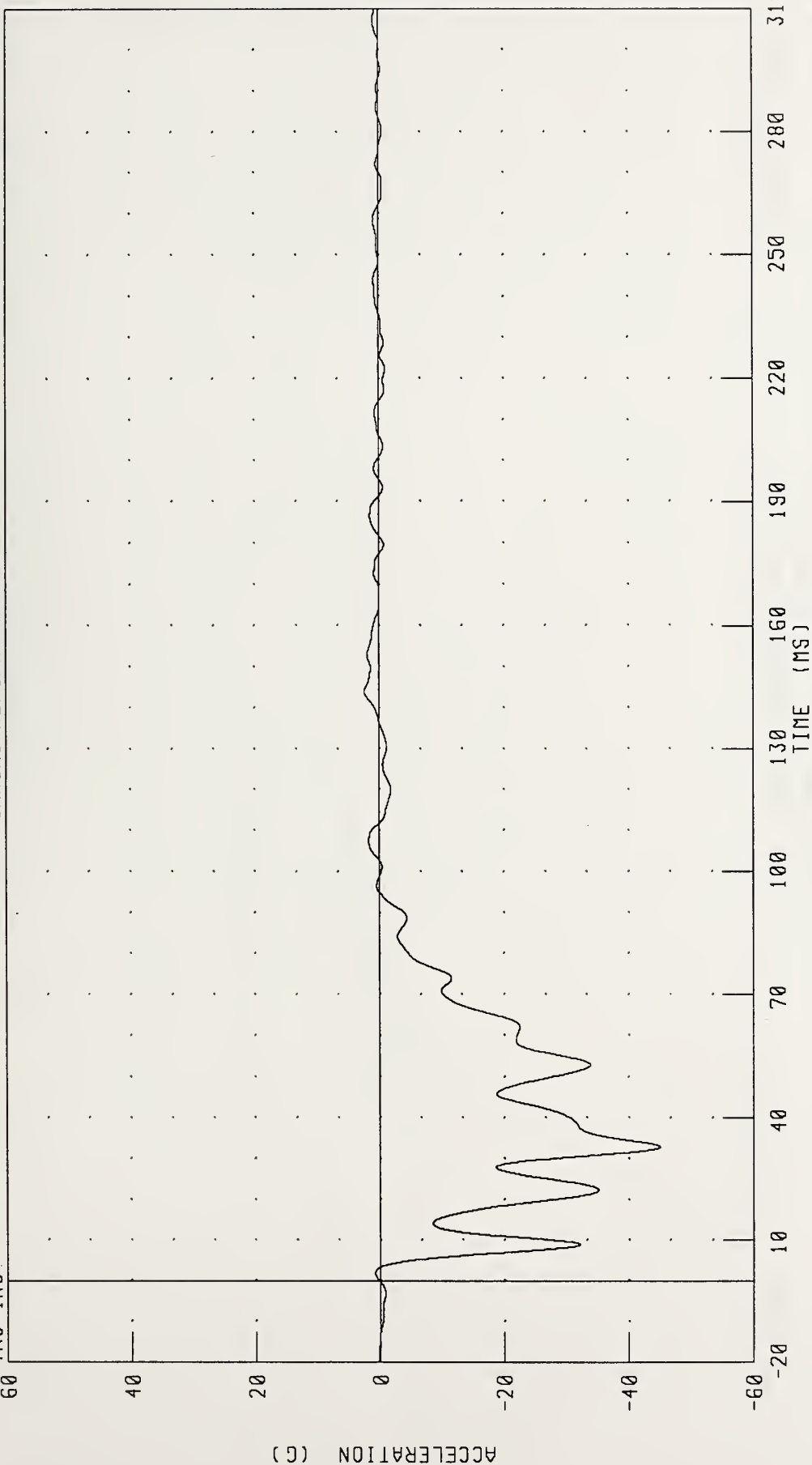


CHANNEL: VCGRD1 FILTER: CH CLASS 180 PEAK DATA: 324 18 MM @ 27.92 MS, -9408.73 MM @ 310.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
LEFT FRONT SILL X-AXIS ACCELERATION

CRASH3 REFORMULATION TEST NUMBER 950119

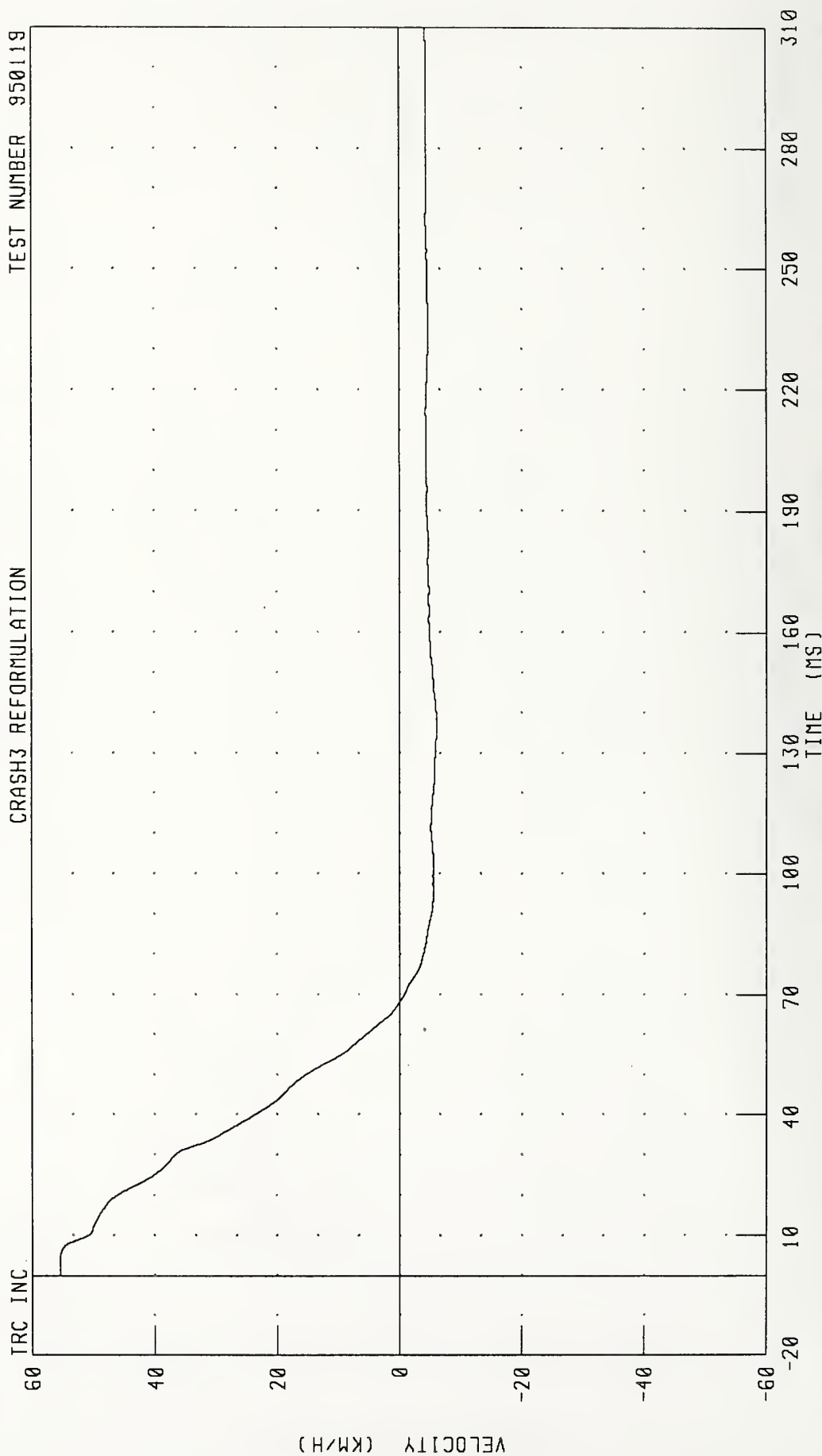
TRC INC



CHANNEL LFSXG1 FILTER CH CLASS 60

PEAK DATA: 2.36 G @ 143.92 MS; -44.99 G @ 32.80 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
LEFT FRONT STILL X-AXIS VELOCITY



CHANNEL: LFSXV1 FILTER: CH. CLASS 180

PEAK DATA: 55.42 KM/H @ 1.84 MS; -6.06 KM/H @ 135.84 MS

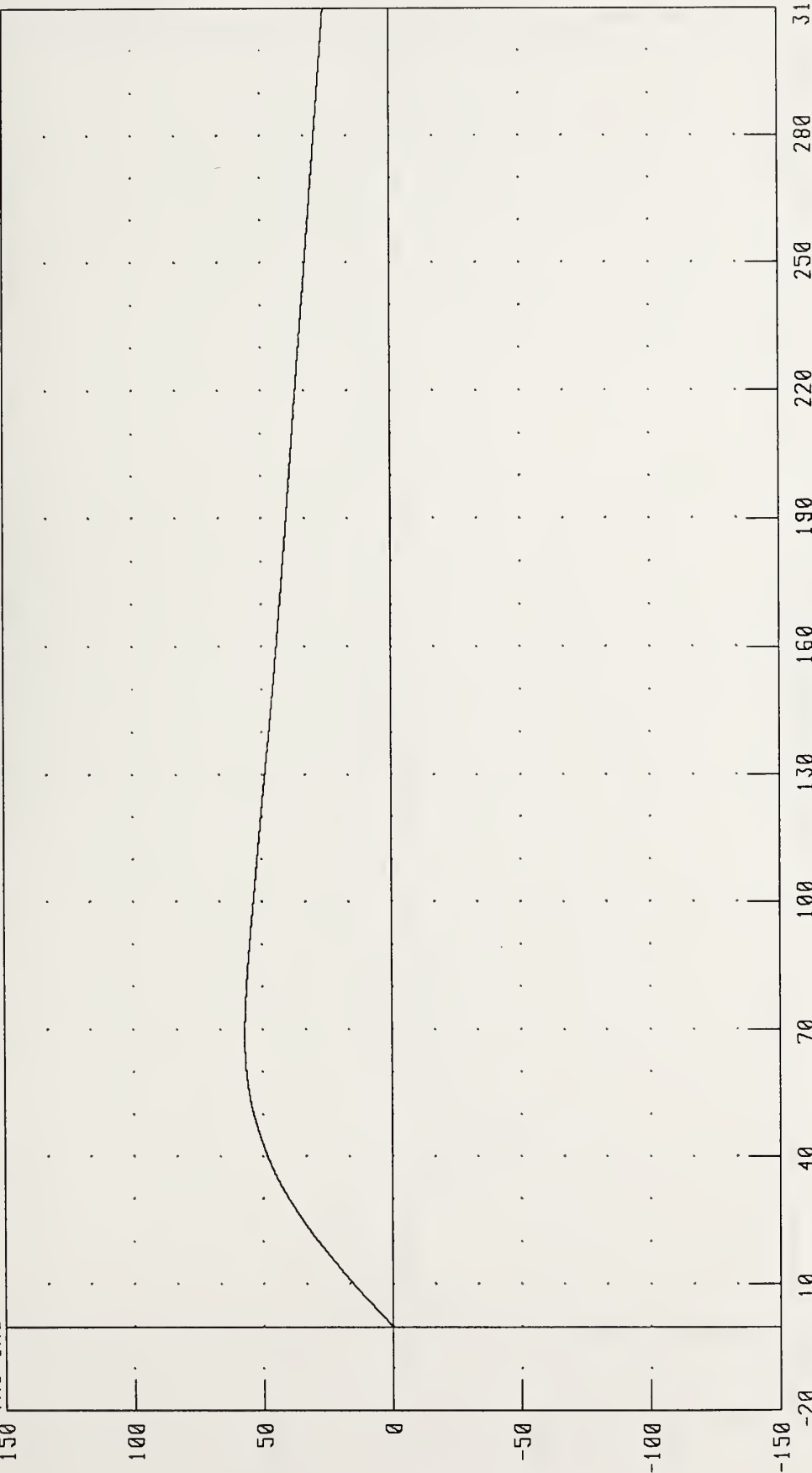
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
LEFT FRONT SILL X-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC

DISPLACEMENT (MM X 10¹)

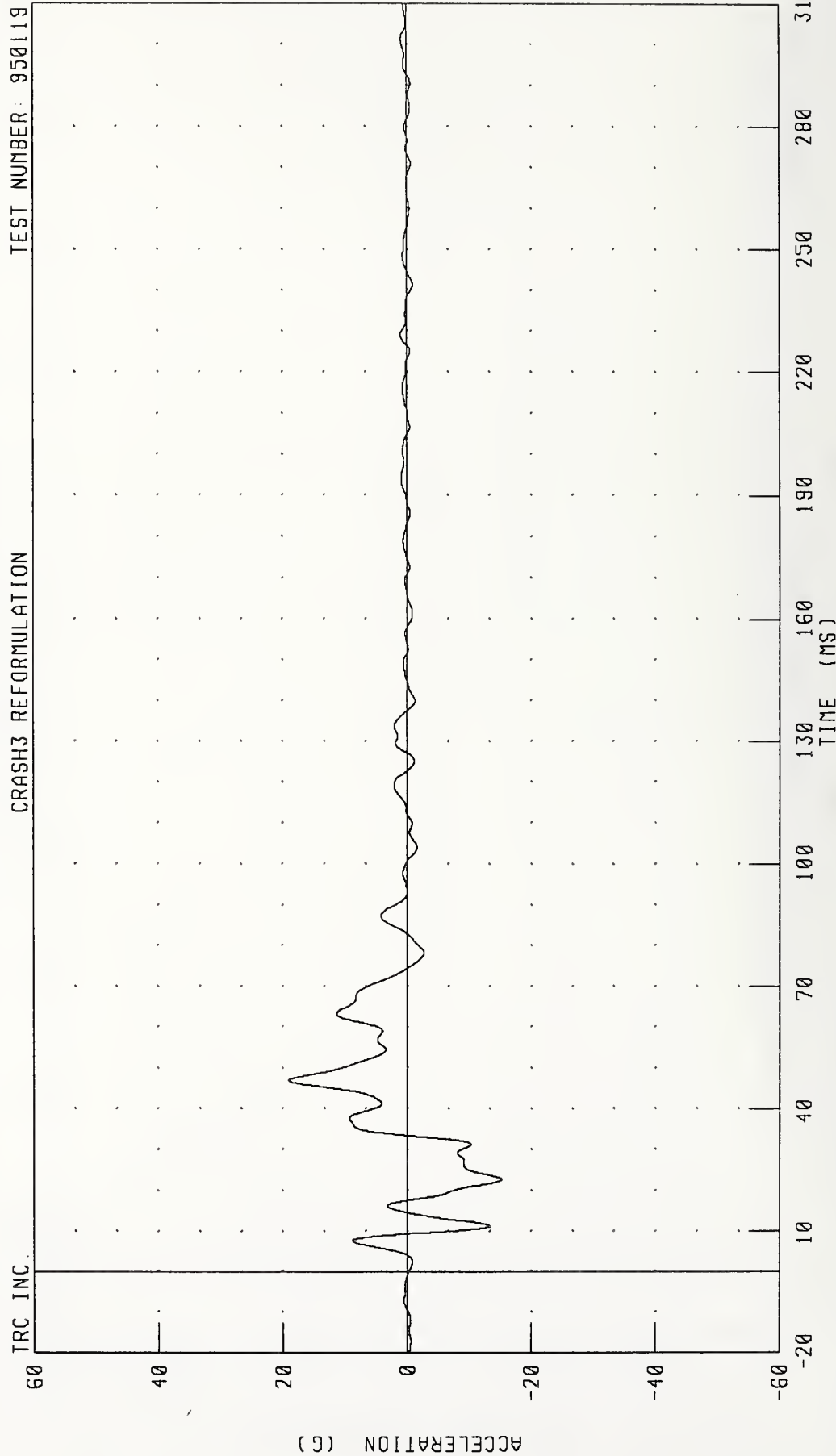


CHANNEL LFSXD1 FILTER CH CLASS 180

TIME (MS)

PEAK DATA: 570.39 MM @ 68.16 MS; 0.00 MM @ 0.00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
LEFT FRONT SILL Y-AXIS ACCELERATION

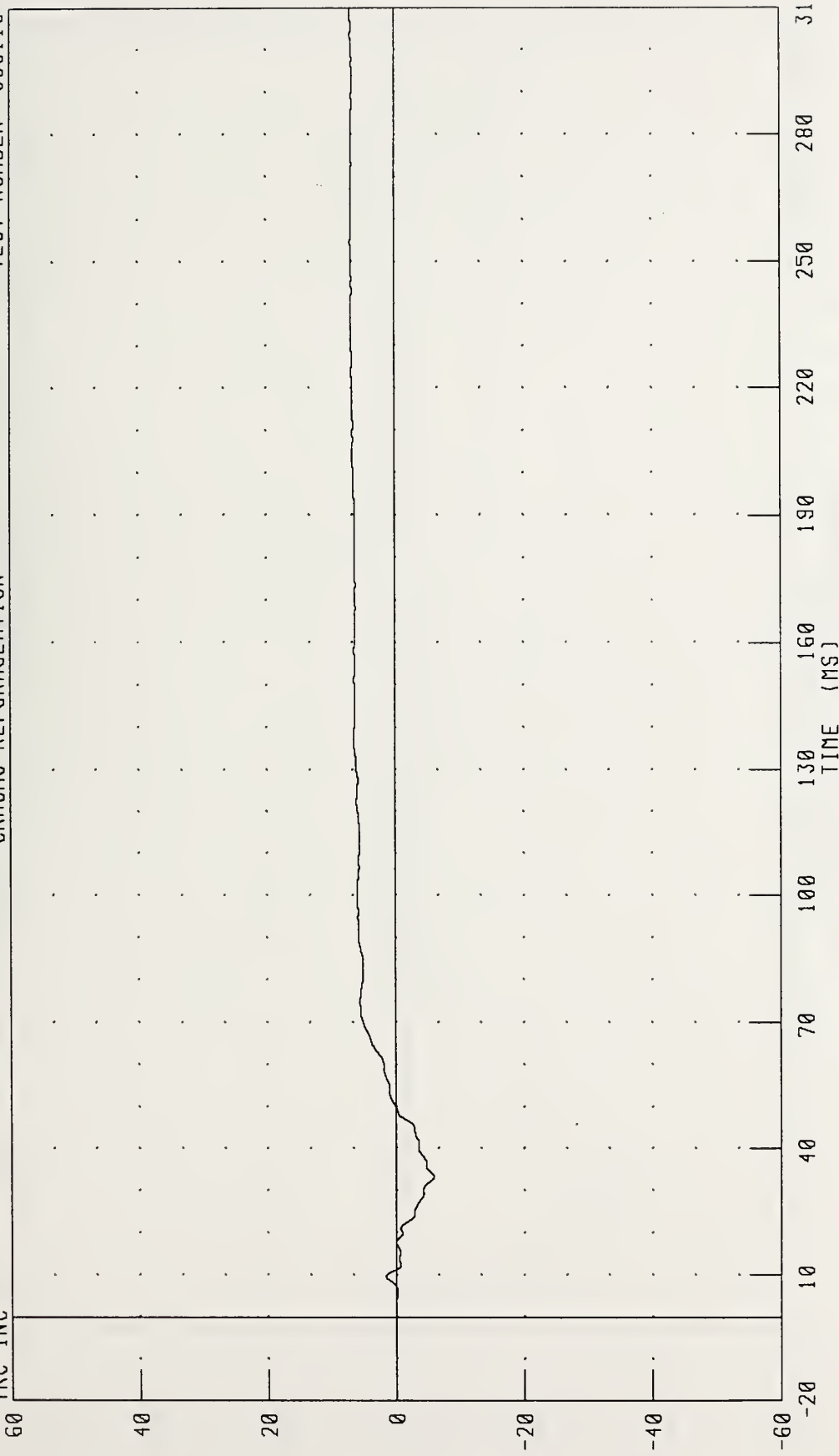


1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
LEFT FRONT SILL Y-AXIS VELOCITY

TEST NUMBER: 950119

CRASH3 REFORMULATION

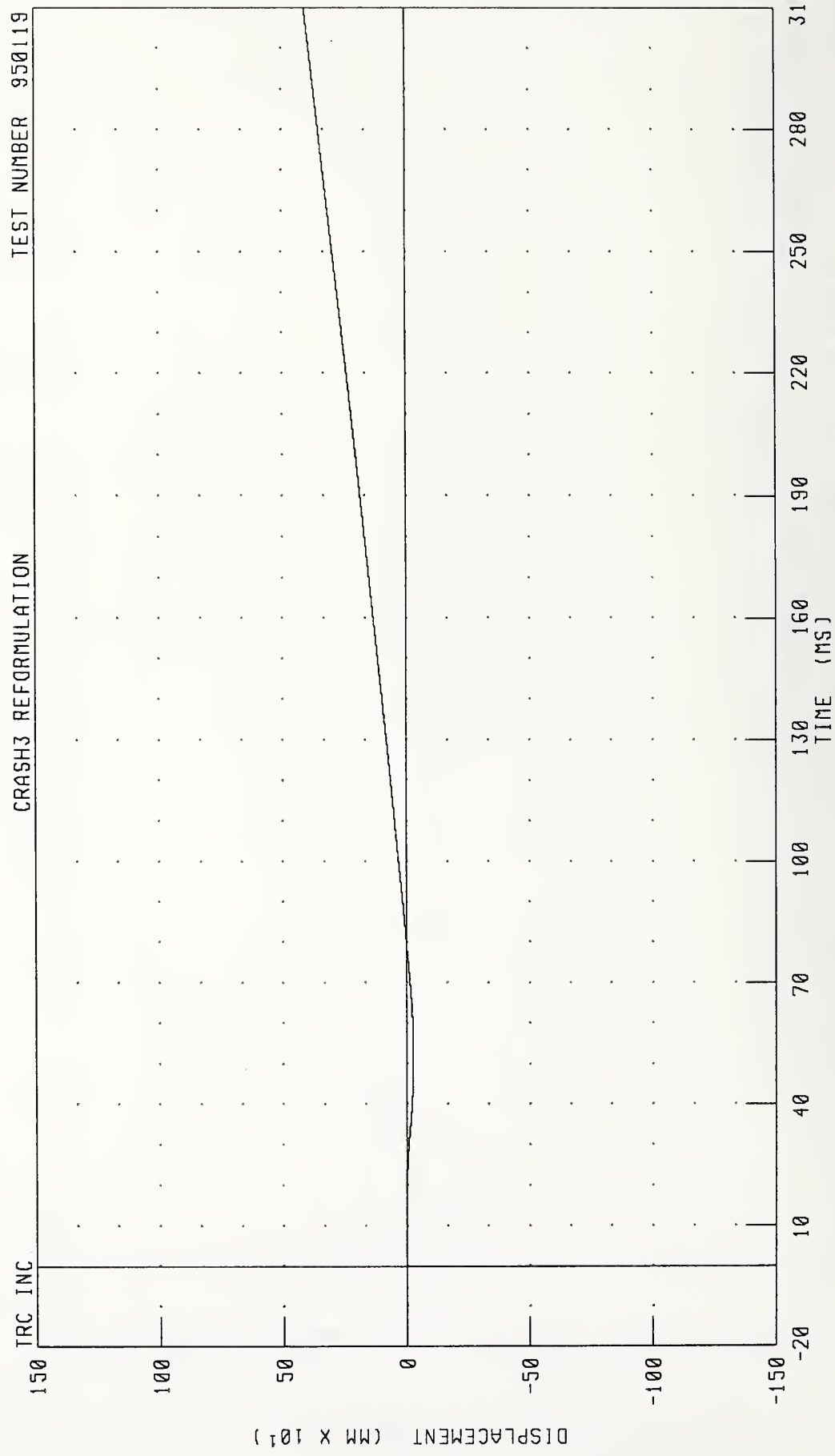
TRC INC



CHANNEL: LFSYV1 FILTER: CH CLASS 180

PEAK DATA: 6.94 KM/H @ 310.00 MS, -5.92 KM/H @ 33.20 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
 LEFT FRONT SILL Y-AXIS DISPLACEMENT



1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
RIGHT FRONT SILL X-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC.

60

40

20

0

-20

-40

-60

ACCELERATION (G)

TEST NUMBER 950119

TIME (MS)

130

160

190

220

250

280

310

PEAK DATA 1 82 G @ 152.32 MS, -39 43 G @ 35 52 MS

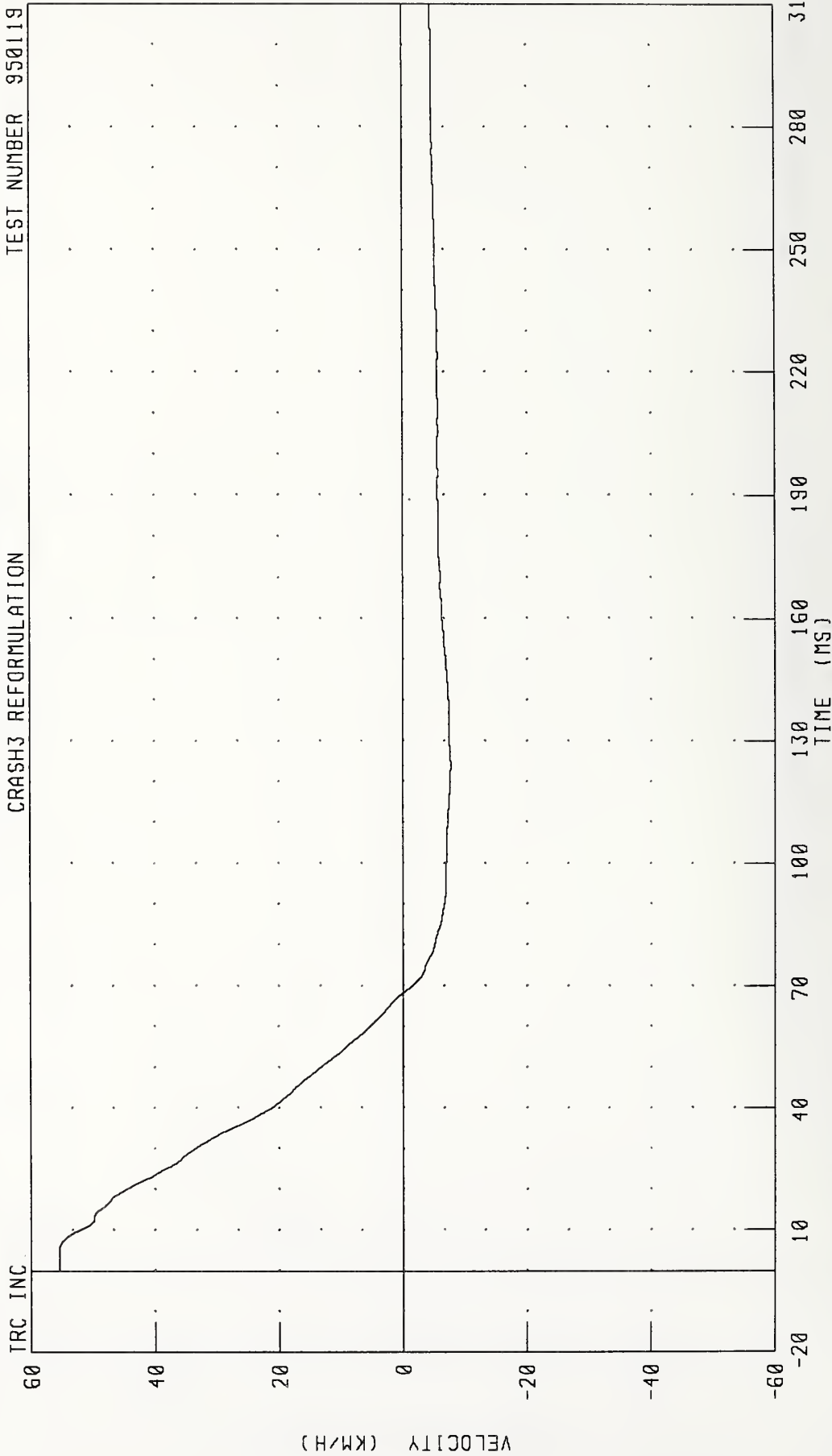
CHANNEL: RFSXG1

FILTER: CH

CLASS 60

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
 RIGHT FRONT SILL X-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119



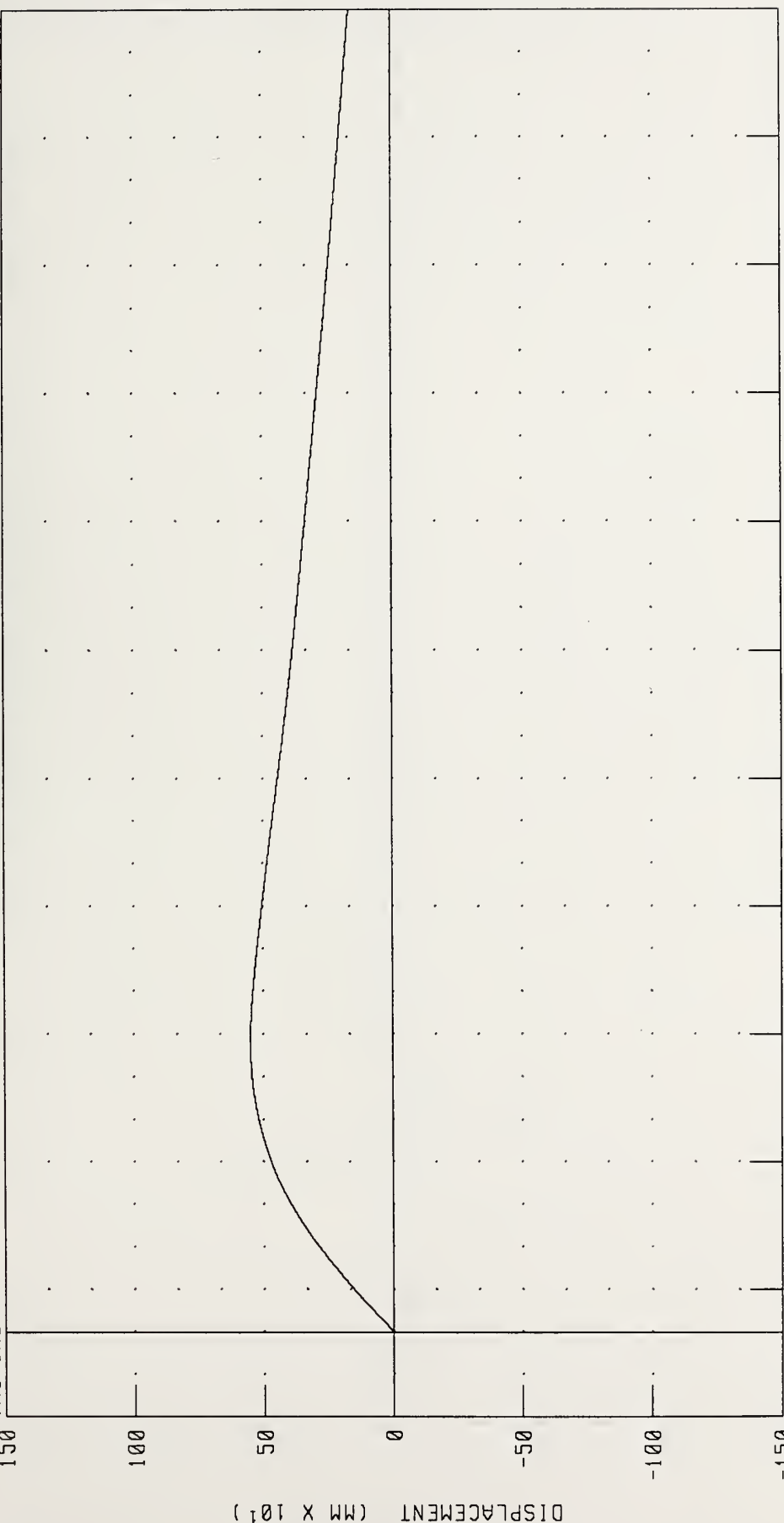
CHANNEL: RFSXV1 FILTER: CH CLASS 180 PEAK DATA: 55.44 KM/H @ 2.16 MS; -7.71 KM/H @ 123.76 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
 RIGHT FRONT SILL X-AXIS DISPLACEMENT

CRASH3 REFORMULATION

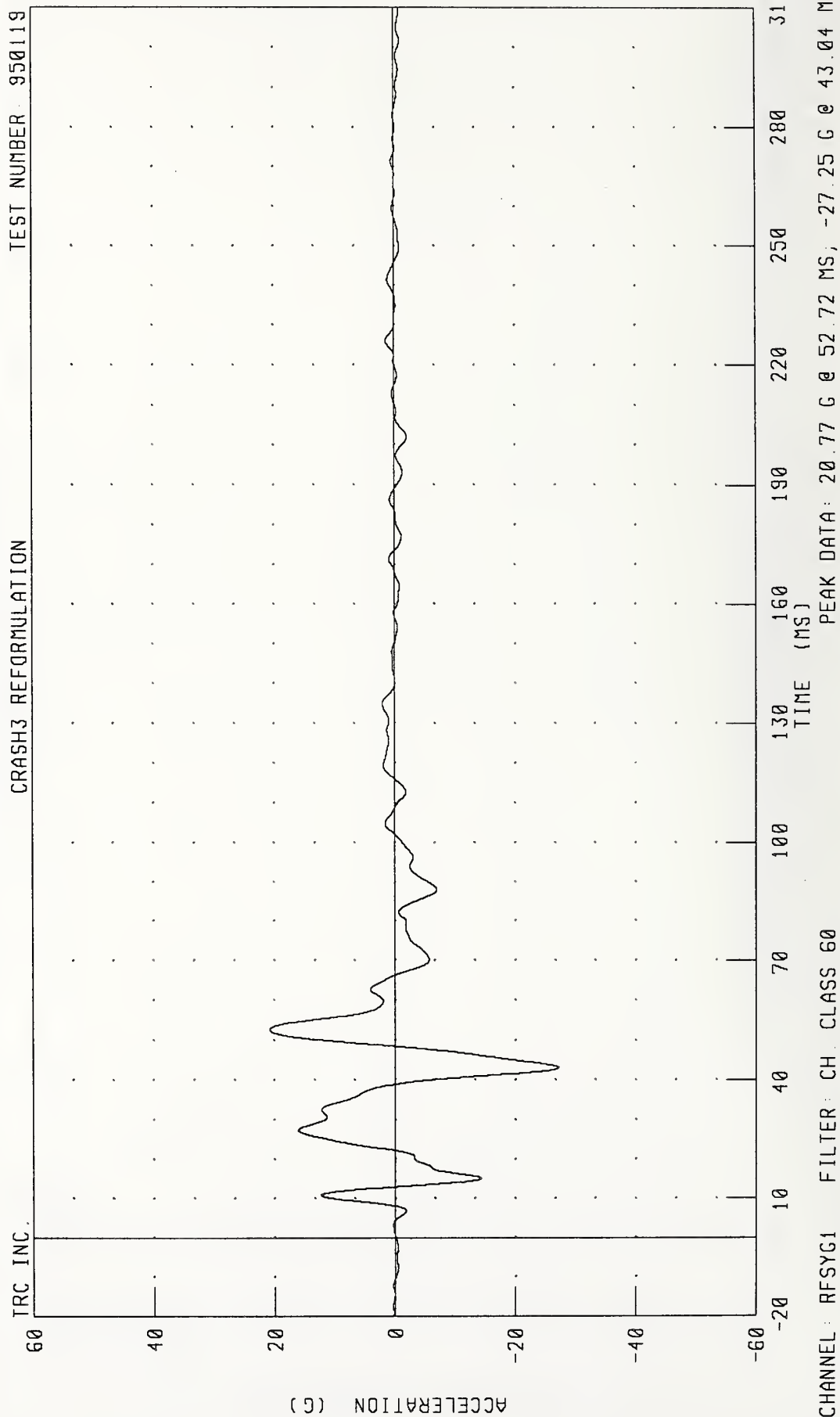
TEST NUMBER 950119

TRC INC



CHANNEL: RFSXD1 FILTER: CH CLASS 180
 PEAK DATA: 551.01 MM @ 68.24 MS, 0.00 MM @ 0.00 MS

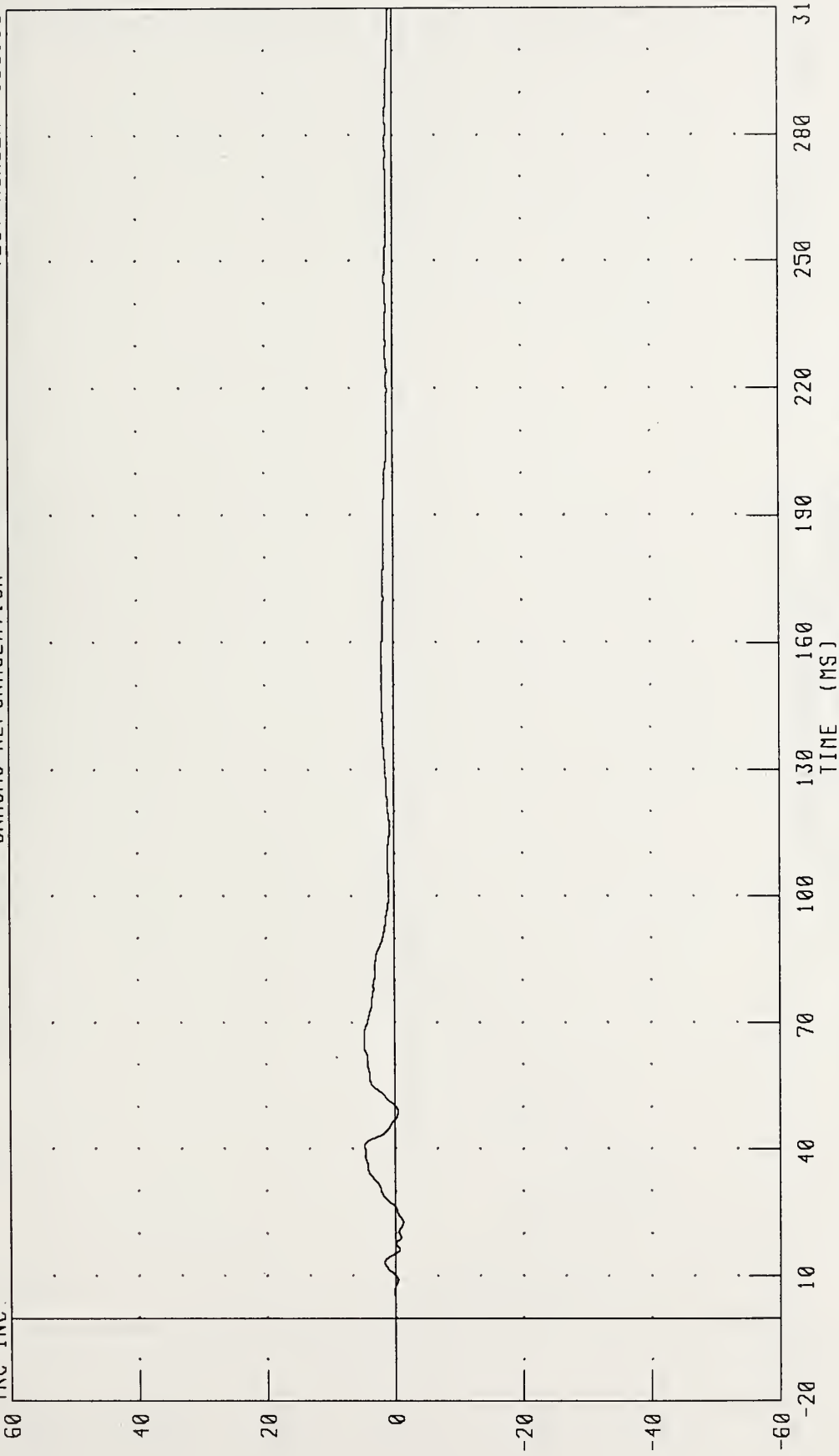
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
RIGHT FRONT SILL Y-AXIS ACCELERATION



1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
 RIGHT FRONT SILL Y-AXIS VELOCITY

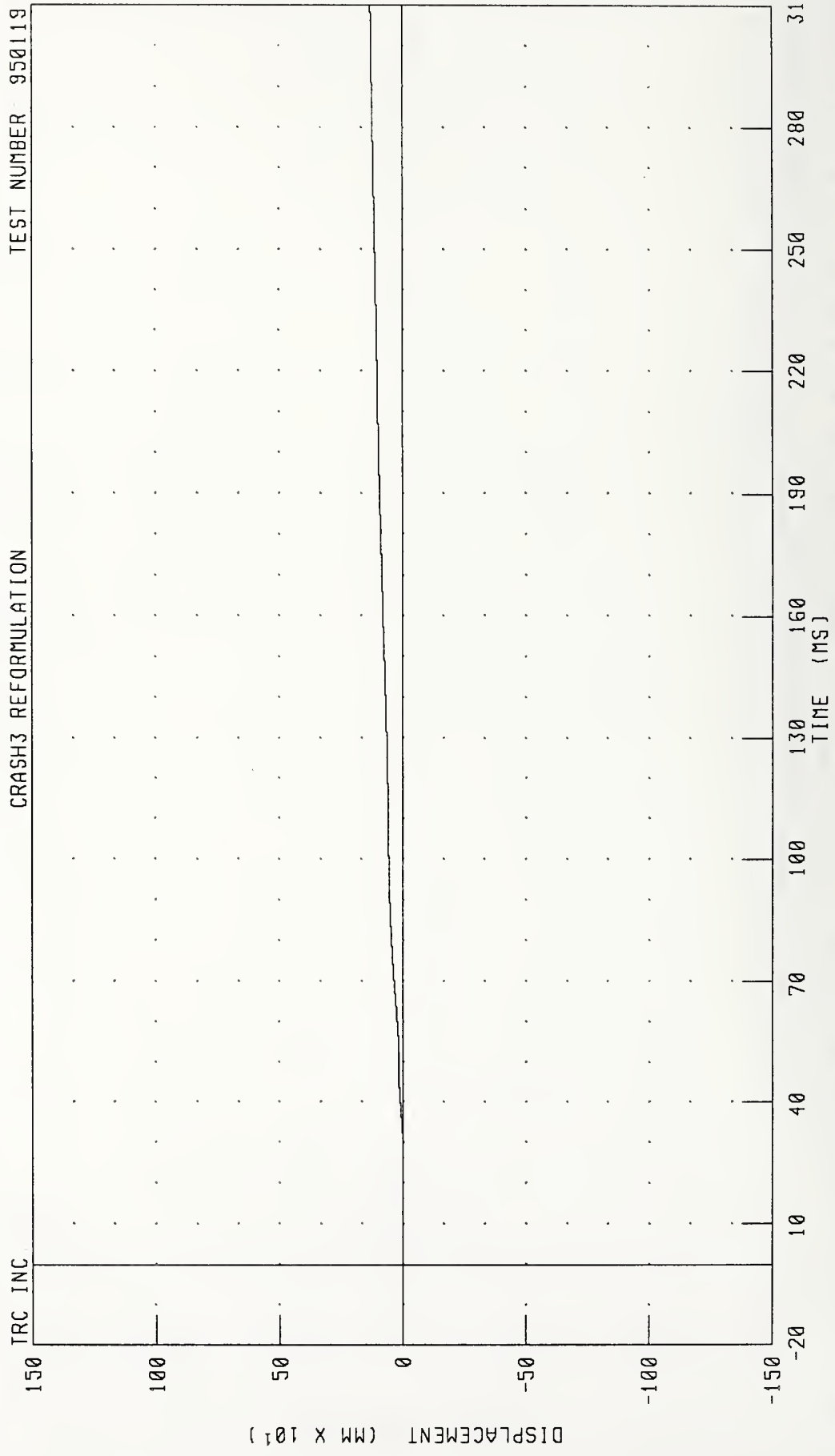
CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



CHANNEL: RFSYV1 FILTER: CH. CLASS 180 PEAK DATA: 4.82 KM/H @ 67.36 MS, -1.26 KM/H @ 22.64 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
 RIGHT FRONT SILL Y-AXIS DISPLACEMENT



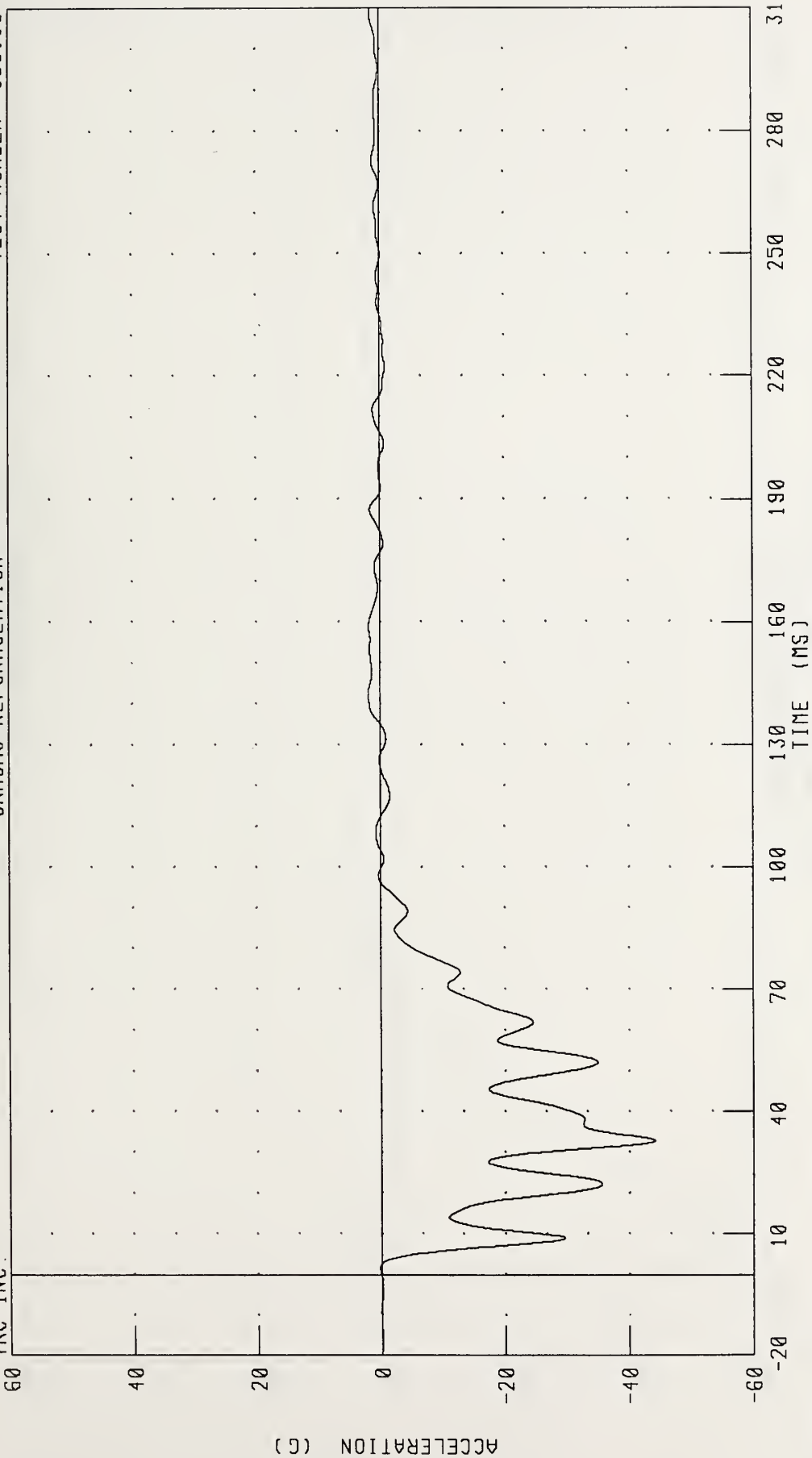
CHANNEL: RFSYD1 FILTER: CH CLASS 180 PEAK DATA: 129.73 MM @ 310.00 MS; -0.50 NM @ 26.32 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
LEFT REAR SEAT X-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC.

TEST NUMBER 950119



CHANNEL: TLRXG1 FILTER: CH CLASS 60

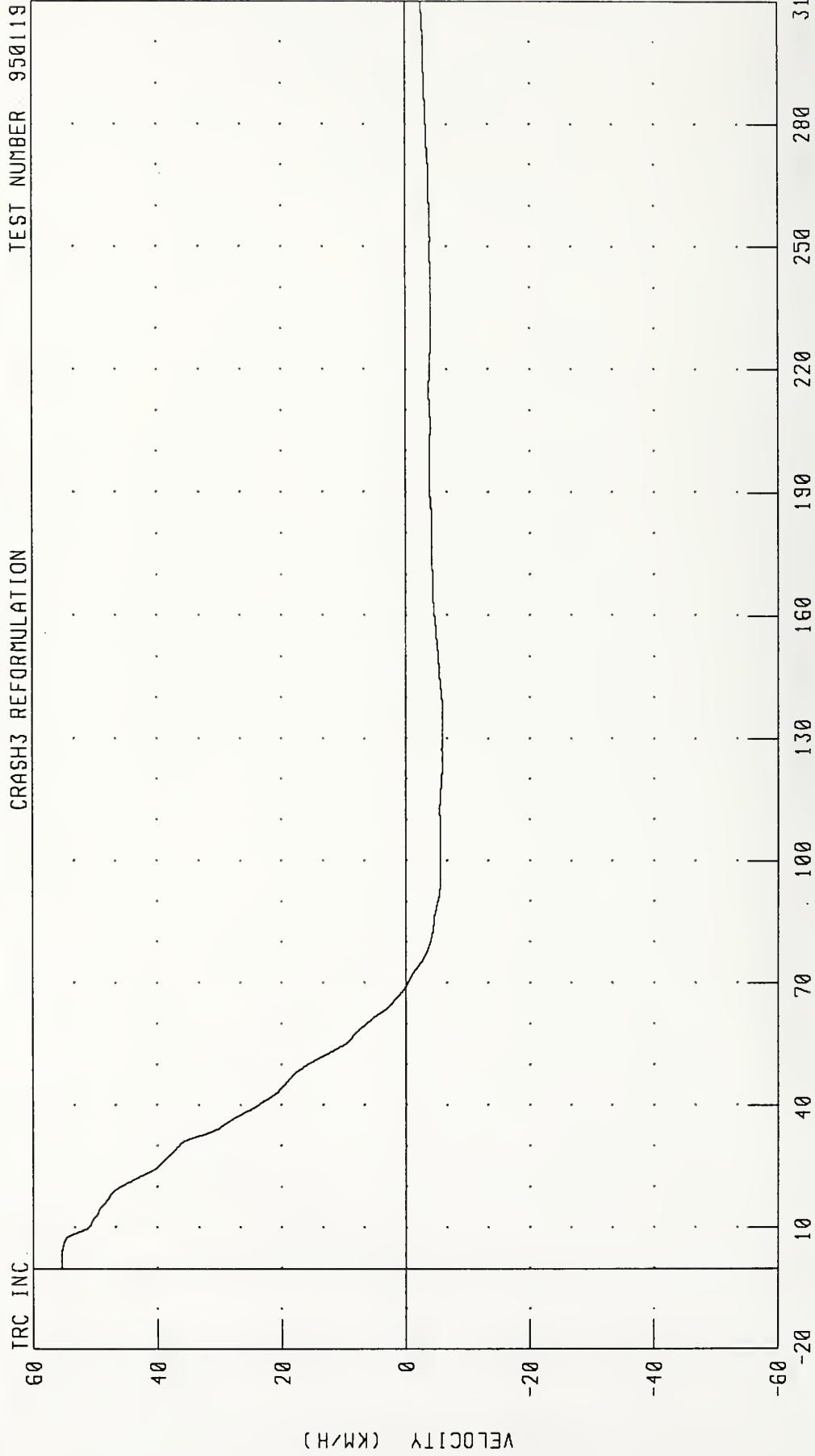
PEAK DATA: 1.85 G @ 142.56 MS, -44 13 G @ 32 80 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5

LEFT REAR SEAT X-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER 950119



CHANNEL: TLRXV1 FILTER: CH CLASS 180

PEAK DATA: 55.40 KM/H @ 0.00 MS, -6.00 KM/H @ 135.60 MS

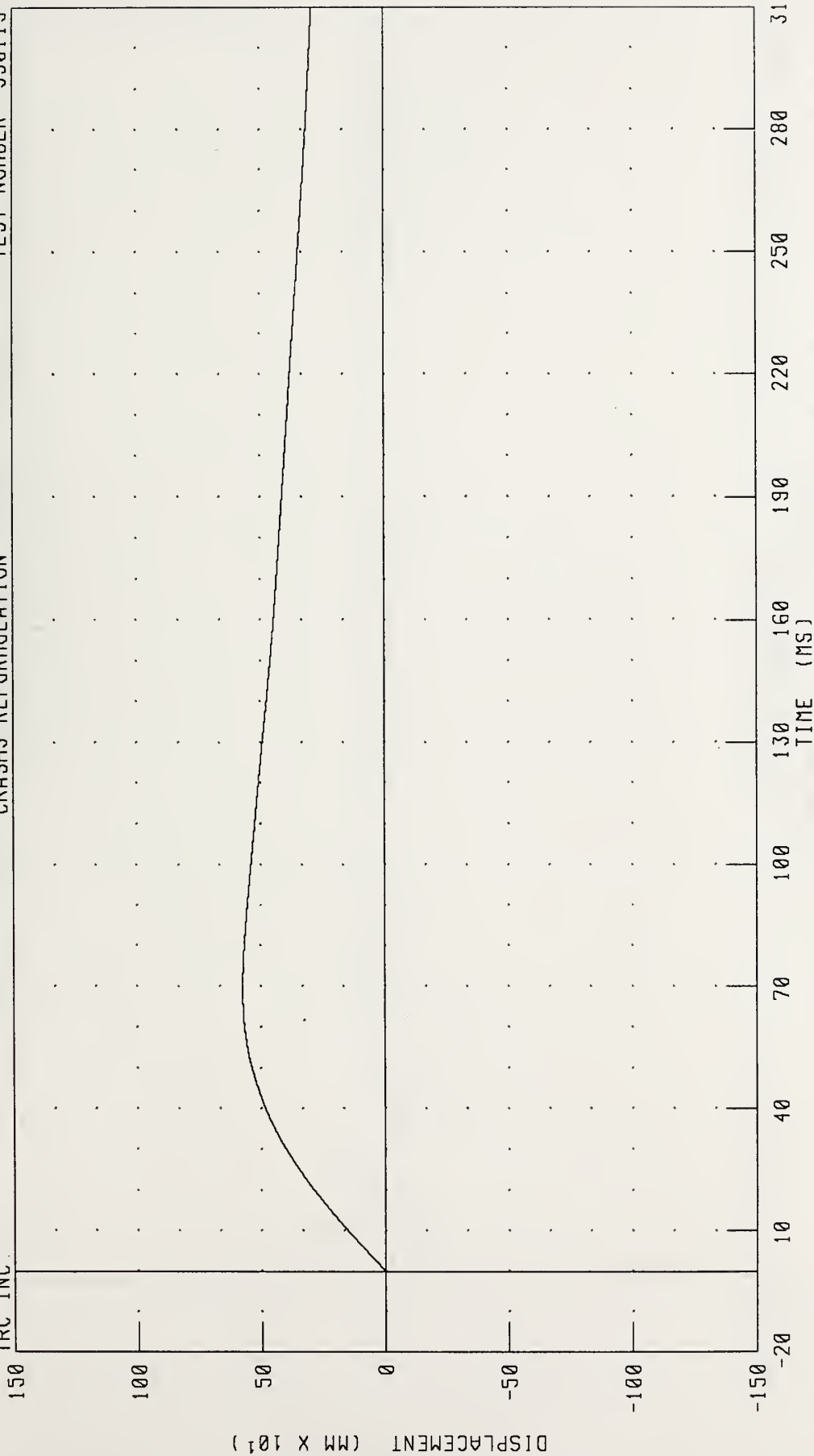
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5

LEFT REAR SEAT X-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TEST NUMBER: 950119

TRC INC.



CHANNEL: TLRX01 FILTER: CH CLASS 180

PEAK DATA: 574 80 MM @ 69 04 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
LEFT REAR SEAT Y-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC.

60

40

20

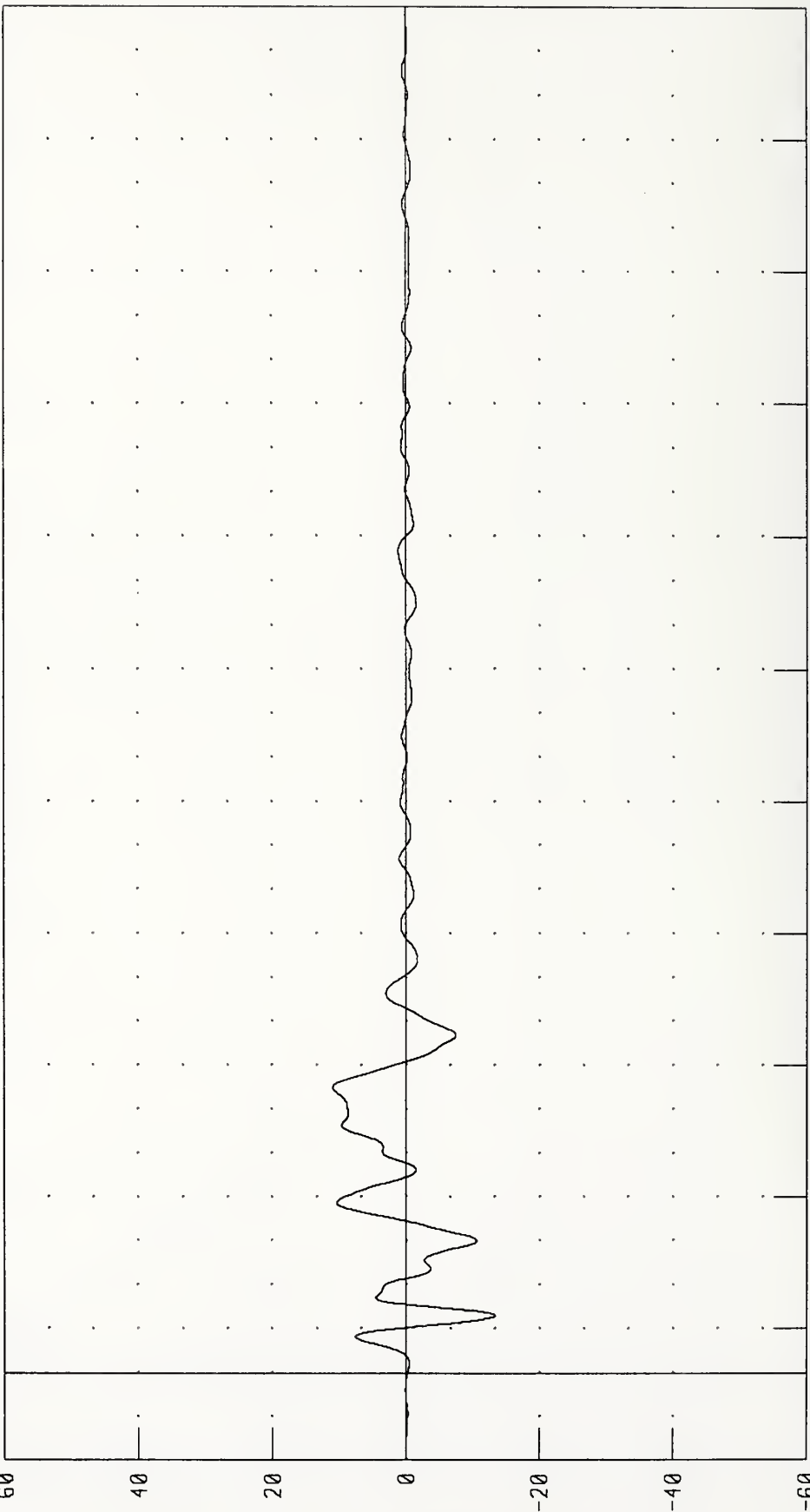
0

-20

-40

-60

ACCELERATION (G)



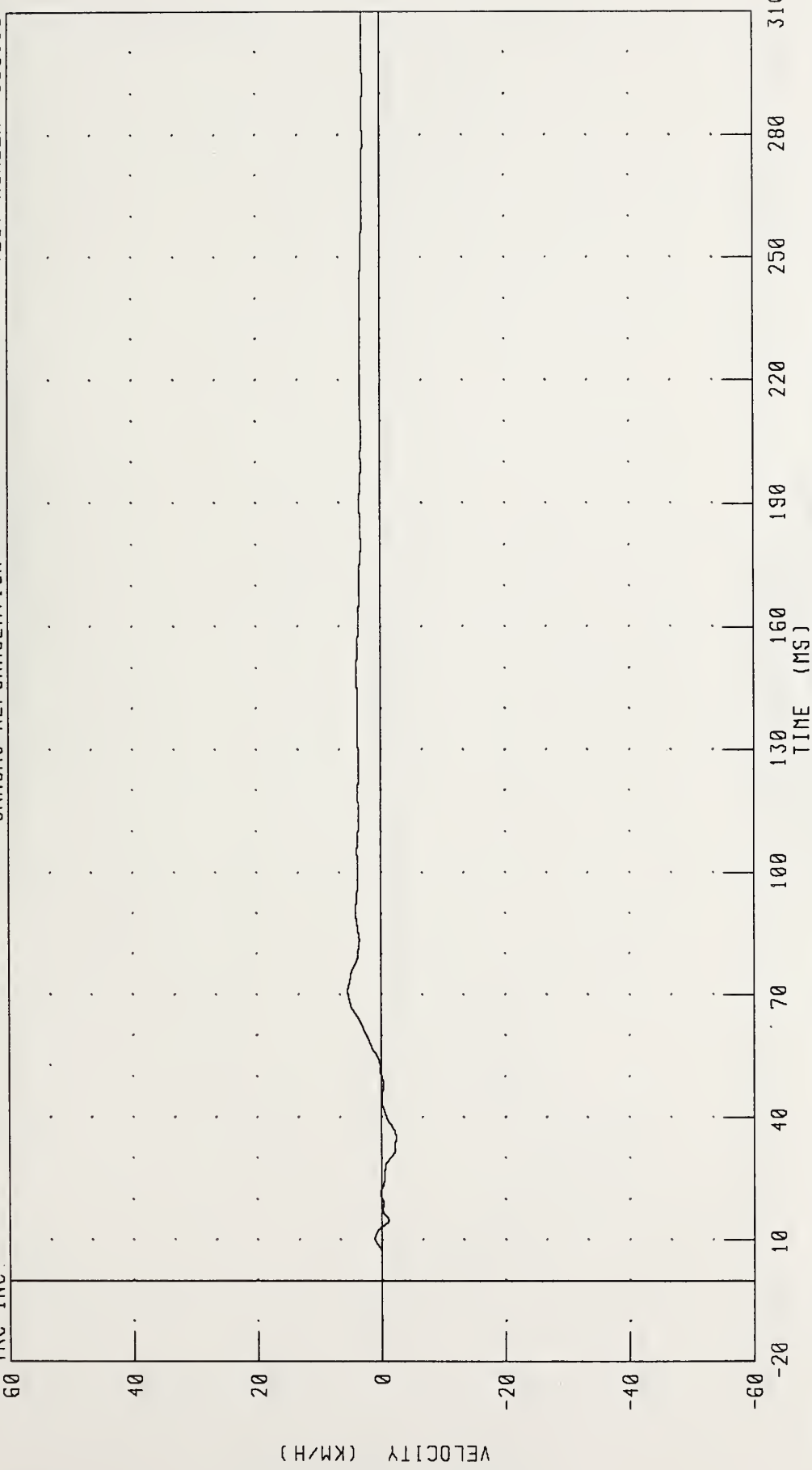
CHANNEL: TLRYG1 FILTER: CH CLASS 60

PEAK DATA: 11.00 G @ 64.96 MS, -13.29 G @ 12.96 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
LEFT REAR SEAT Y-AXIS VELOCITY

CRASH3 REFORMULATION TEST NUMBER 950119

TRC INC.



CHANNEL: TLRYV1 FILTER: CH. CLASS 180

PEAK DATA: 5.38 KM/H @ 70.80 MS; -2.40 KM/H @ 34.80 MS

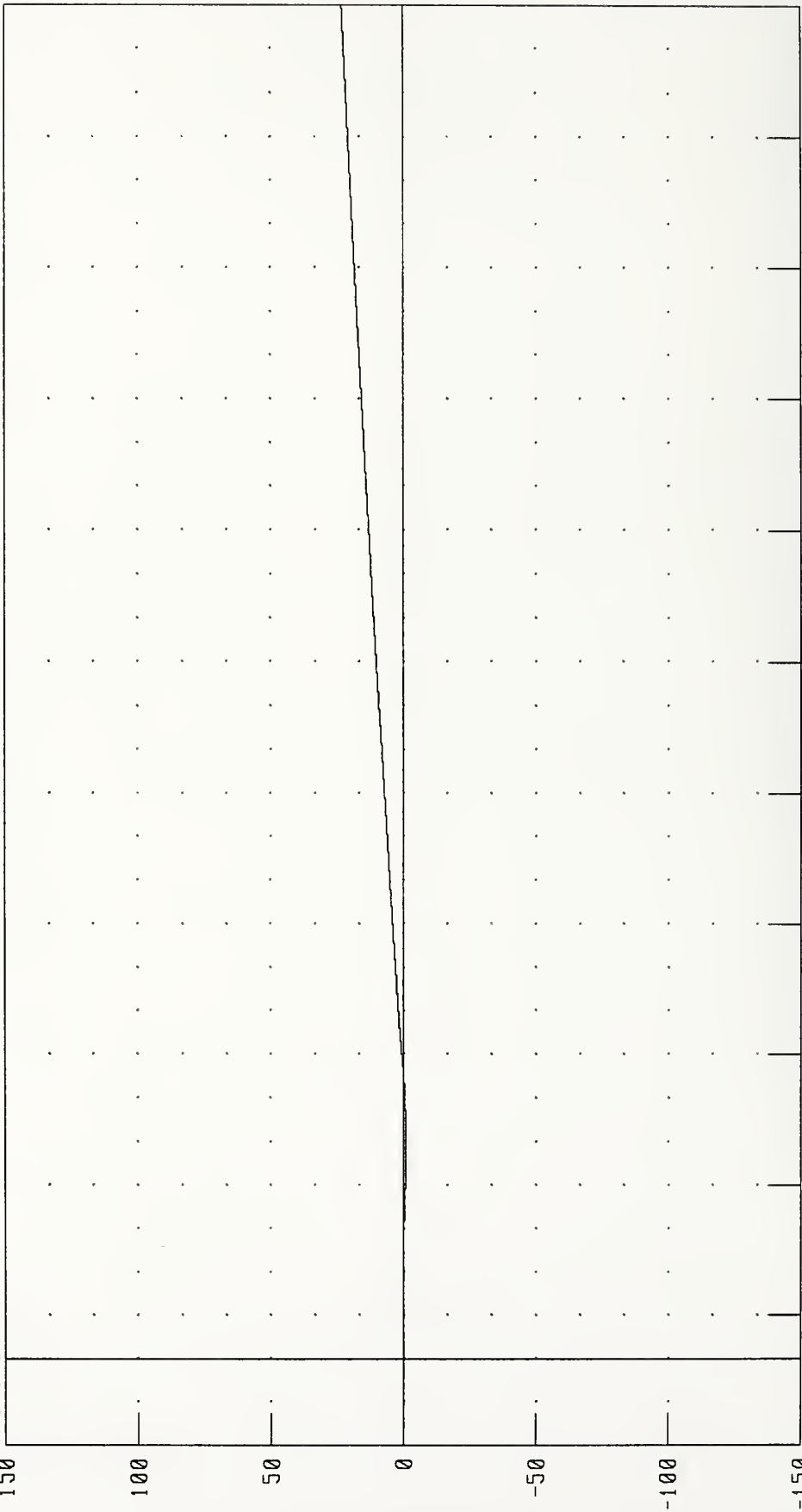
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5

LEFT REAR SEAT Y-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.



CHANNEL: TLRY01 FILTER: CH. CLASS 180

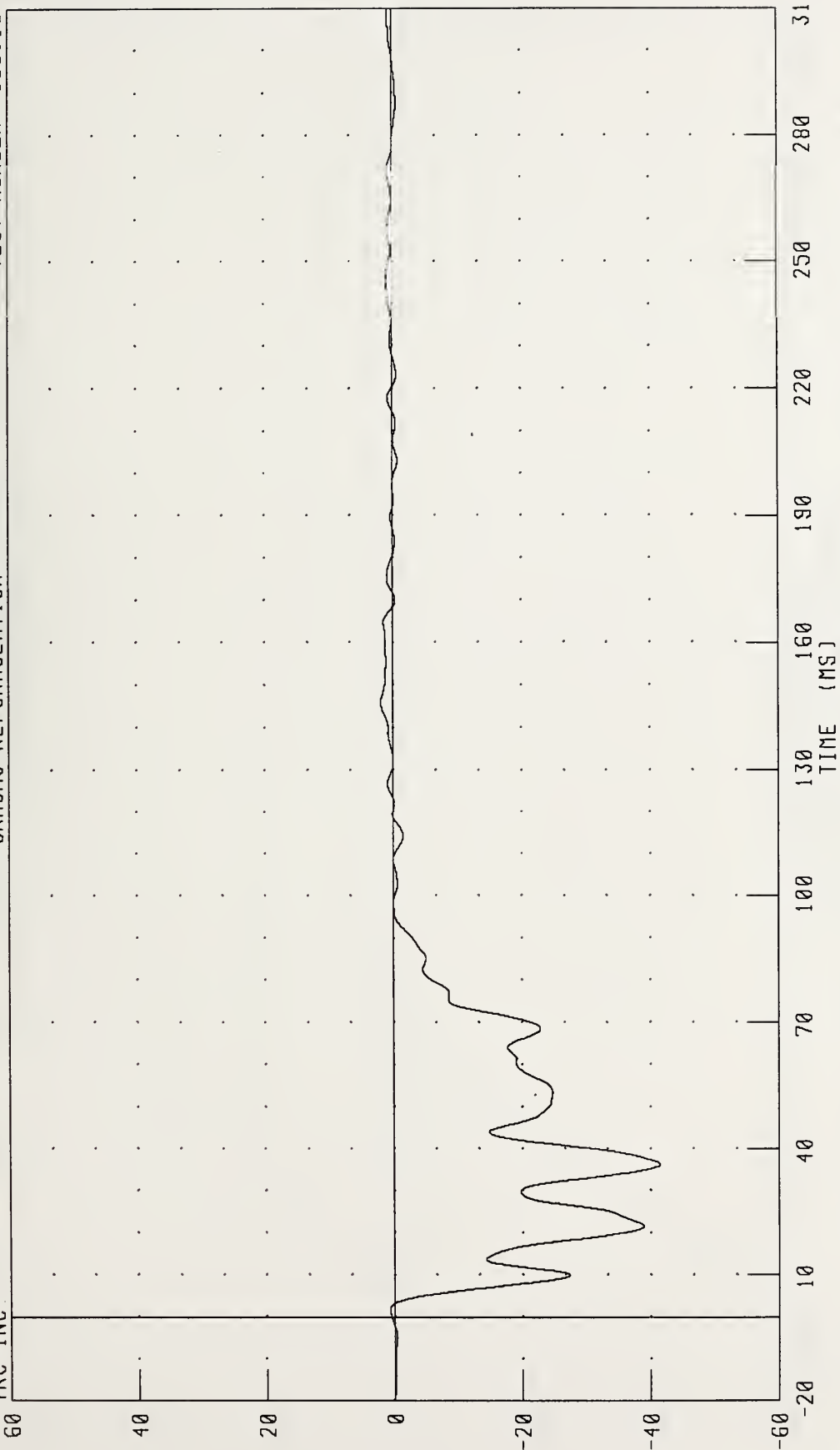
PEAK DATA: 231.53 MM @ 310.00 MS, -7.12 MM @ 50.08 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
RIGHT REAR SEAT X-AXIS ACCELERATION

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.



CHANNEL: TRRXG1 FILTER: CH. CLASS 60

PEAK DATA: 1 86 G @ 145.76 MS, -41 48 G @ 36 24 MS

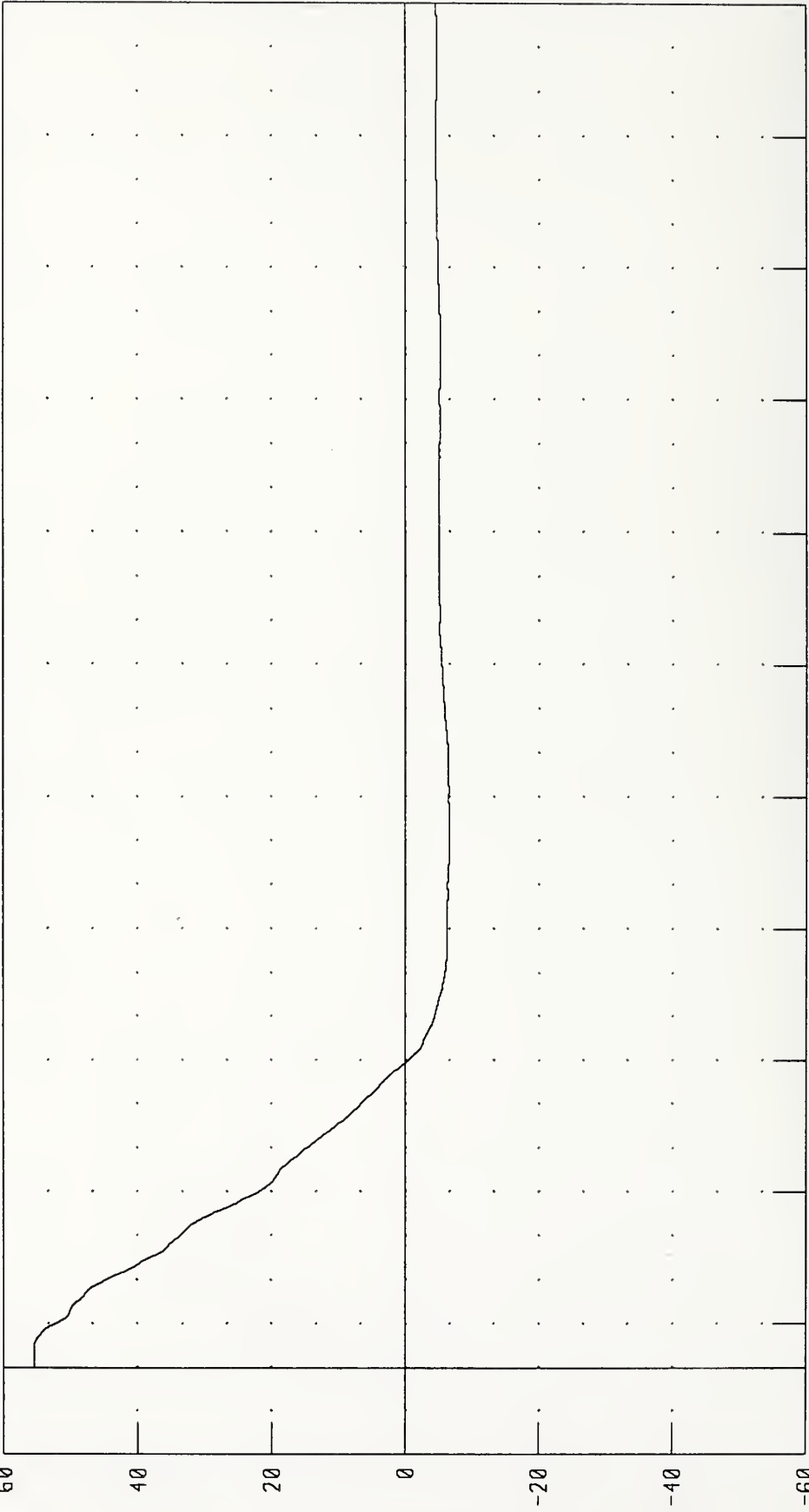
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5

RIGHT REAR SEAT X-AXIS VELOCITY

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC



CHANNEL: TRRXV1 FILTER: CH CLASS 180

TIME (MS)

PEAK DATA: 55.42 KM/H @ 3.76 MS, -6.66 KM/H @ 117.84 MS

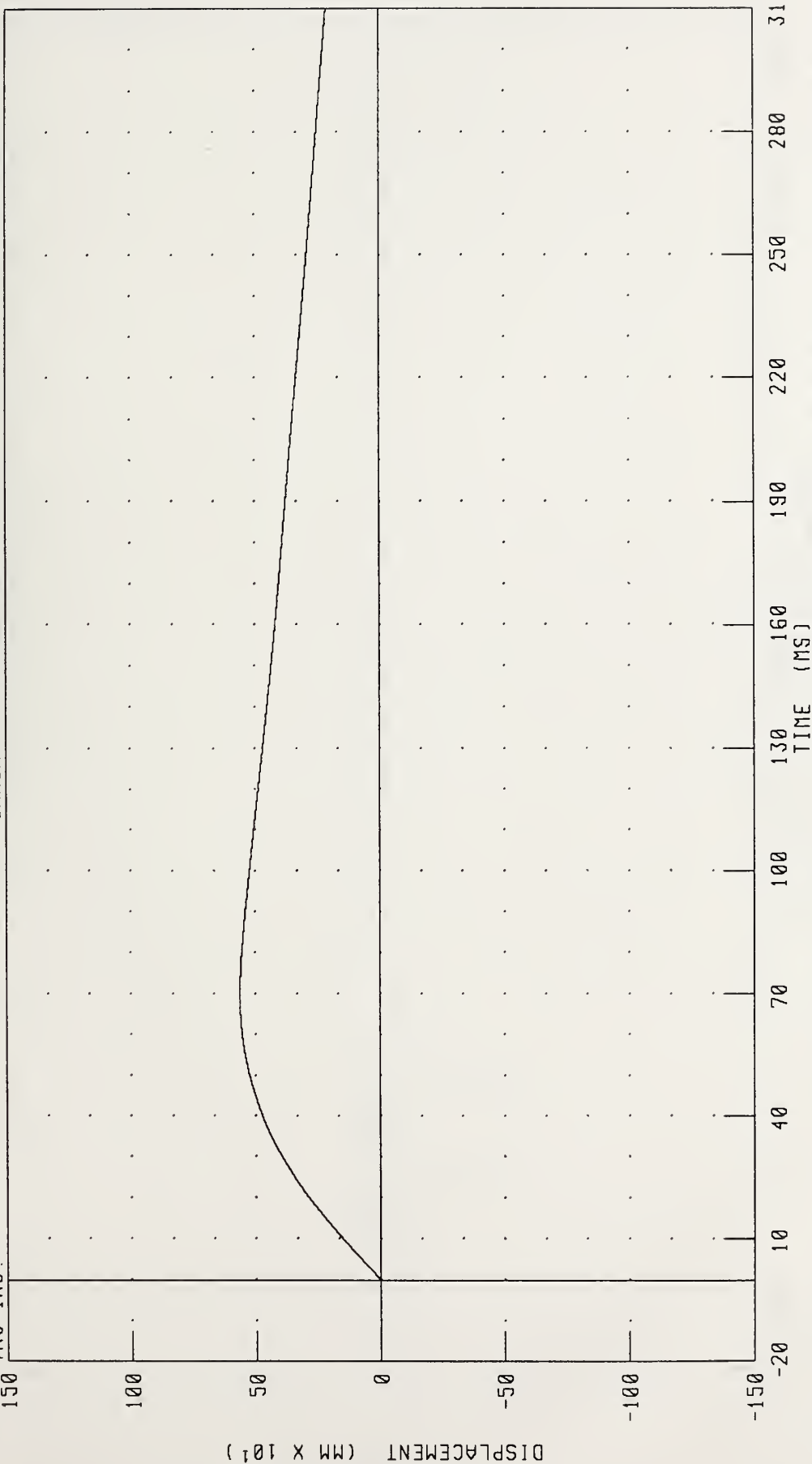
1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5

RIGHT REAR SEAT X-AXIS DISPLACEMENT

CRASH3 REFORMULATION

TEST NUMBER 950119

TRC INC.



CHANNEL: TRRXD1 FILTER: CH. CLASS 180

PEAK DATA: 563.47 MM @ 69 44 MS, 0 00 MM @ 0 00 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5

RIGHT REAR SEAT Y-AXIS ACCELERATION

CRASH3 REFORMULATION

TRC INC

60

40

20

0

-20

-40

-60

ACCELERATION (G)

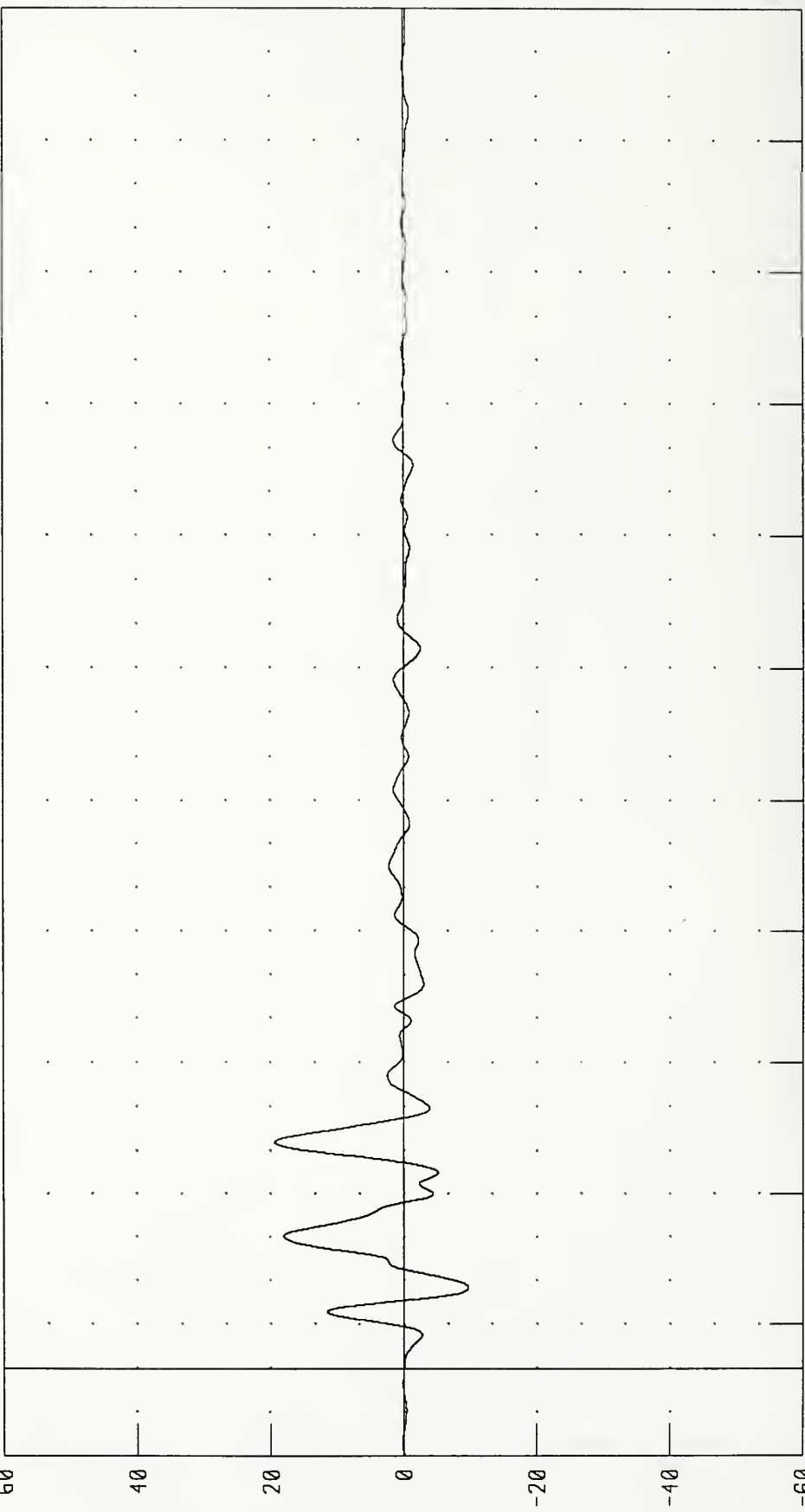
TIME (MS)

10 40 70 100 130 160 190 220 250 280 310

TEST NUMBER: 950119

CHANNEL: TTRYG1

FILTER: CH. CLASS 60



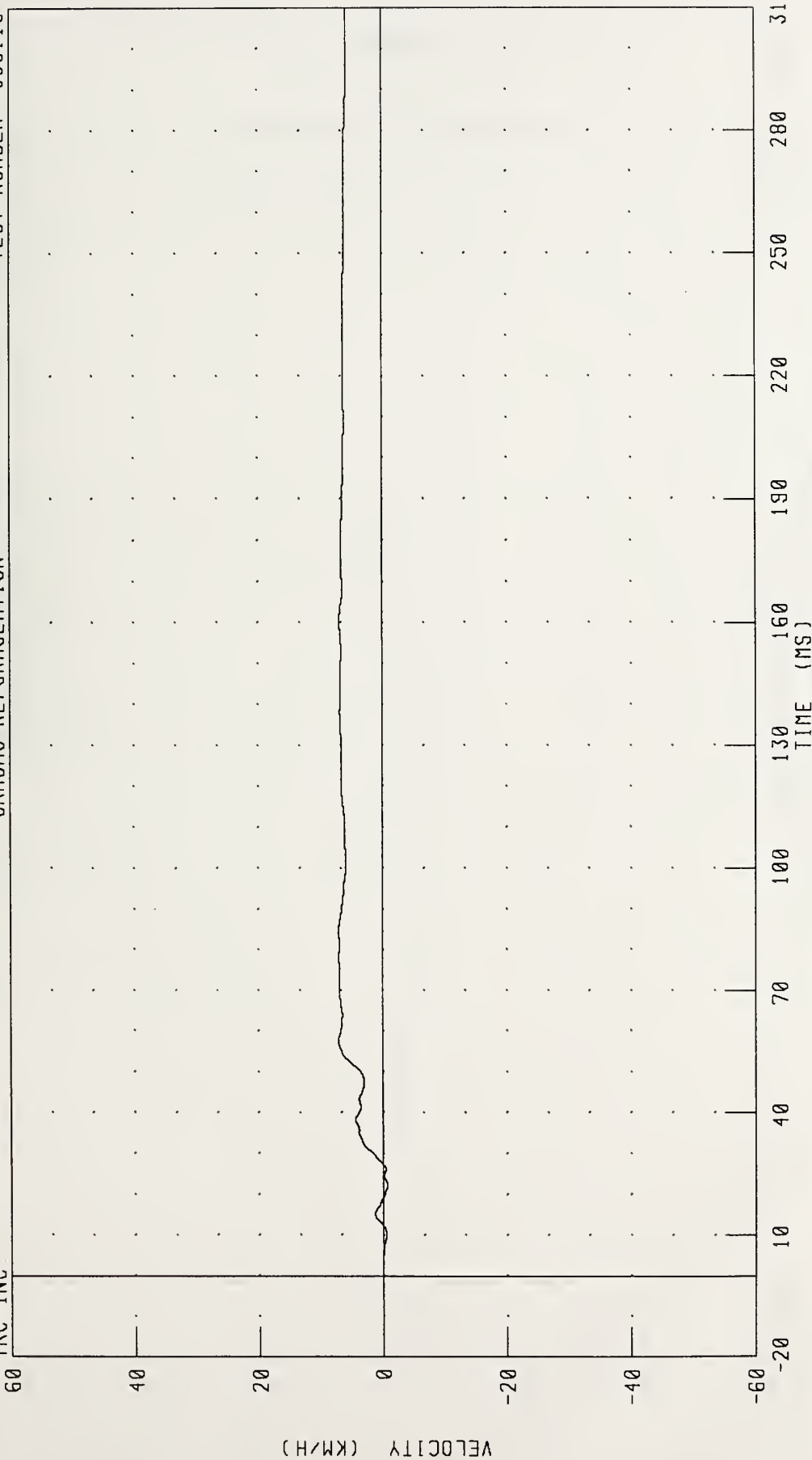
PEAK DATA: 19.41 G @ 51.92 MS, -9.70 G @ 18.40 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
RIGHT REAR SEAT Y-AXIS VELOCITY

TEST NUMBER 950119

CRASH3 REFORMULATION

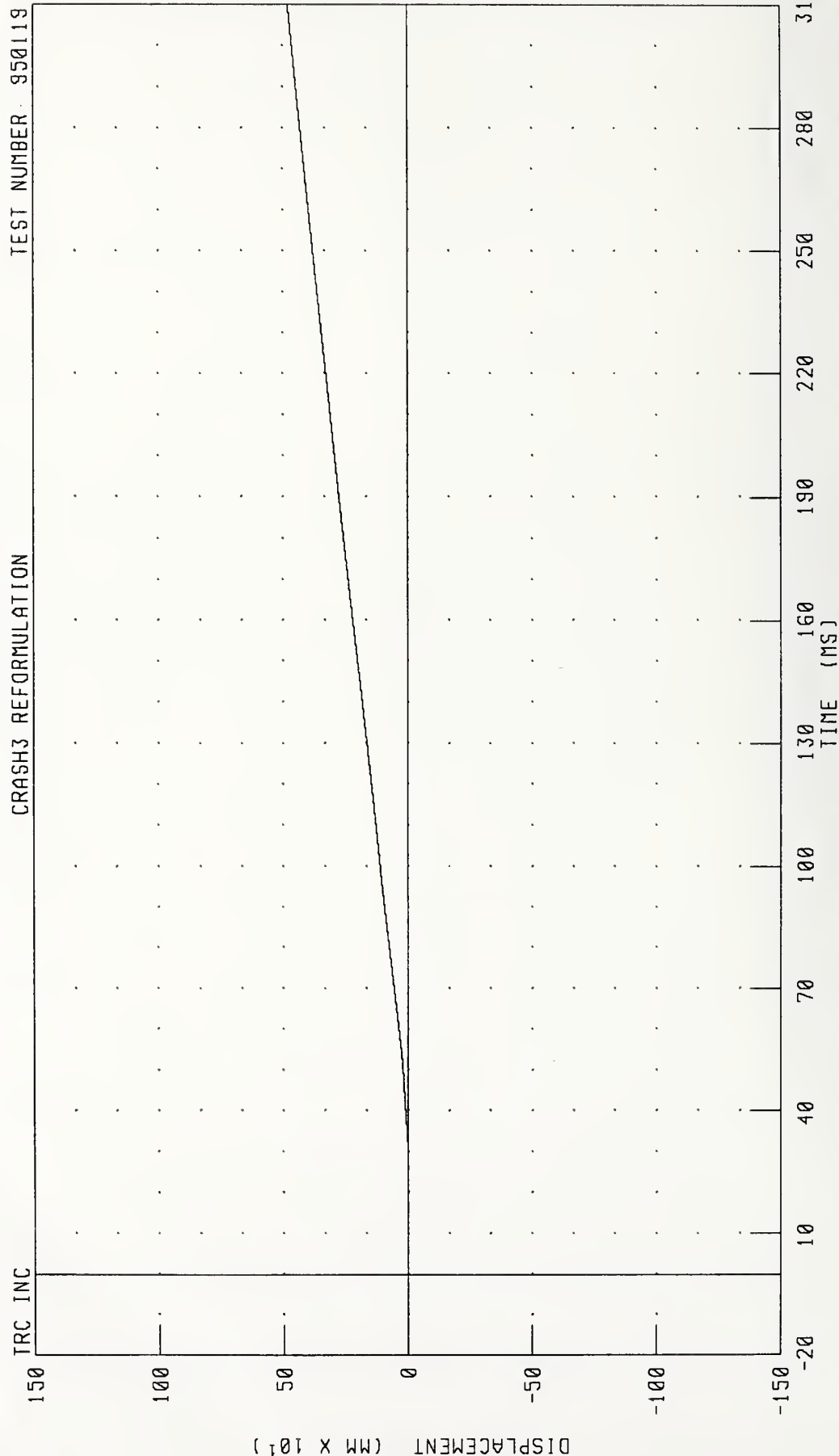
TRC INC



CHANNEL: TRRYV1 FILTER: CH CLASS 180

PEAK DATA: 7.19 KM/H @ 57.44 MS; -0.69 KM/H @ 22.24 MS

1992 CHEVROLET CAPRICE INTO FLAT FRONTAL BARRIER IMPACT 5 OF 5
RIGHT REAR SEAT Y-AXIS DISPLACEMENT



CHANNEL: TRRYD1 FILTER: CH CLASS 180

PEAK DATA: 479.82 MM @ 310.00 MS, -0.58 MM @ 12.32 MS

Appendix C

Miscellaneous Test Information



Vehicle Accelerometer Information

No.	Location	Axis	Manufacturer	Model	Serial Number	Orientation (+ Sensing)
1	Vehicle center of gravity	X	Endevco	7264	BB68	Front
		Y	Endevco	7264	BD41J	Left
		Z	Endevco	7264	BH14J	Up
2	Left rear seat	X	Endevco	7264	BG38J	Front
		Y	Endevco	7264	AJ49	Right
3	Right rear seat	X	Endevco	7264	BG20J	Front
		Y	Endevco	7264	BN09J	Right
4	Left front sill	X	Endevco	7264	EJ60J	Front
		Y	Endevco	7264	BF05	Right
5	Right front sill	X	Endevco	7264	BC41J	Front
		Y	Endevco	7264	BD75J	Left

Sign Convention

All Dummy, Barrier And Vehicle Channels:

+X: Forward

+Y: Leftward

+Z: Upward

+Force: Tension

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